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TITLE: System and method for automated remote previewing and purchasing of music, video, software, and other multimedia products

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INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Bernard; Warren E. | Bethesda | MD | | |
| Jacobson; Philip A. | Vienna | VA | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|---|---|---|---|---|---|
| MCI Communications Corporation | | DE | | | 02 |

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U.S. PATENT DOCUMENTS

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| | PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|---|---|---|---|---|
| ☐ | 3082402 | March 1963 | Scantlin | |
| ☐ | 3159818 | December 1964 | Scantlin | |
| ☐ | 3249919 | May 1966 | Scantlin | |
| ☐ | 3371162 | February 1968 | Scantlin | |
| ☐ | 3381276 | April 1968 | James | |
| ☐ | 3482057 | December 1969 | Abbott et al. | |

| | | | | |
|---|---|---|---|---|
| ☐ | | | | |
| ☐ | 4947028 | August 1990 | Gorog | |
| ☐ | 4969183 | November 1990 | Reese | |
| ☐ | 4975945 | December 1990 | Carbullido | |
| ☐ | 4989233 | January 1991 | Schakowsky et al. | |
| ☐ | 4992940 | February 1991 | Dworkin | |
| ☐ | 5014298 | May 1991 | Katz | |
| ☐ | 5048075 | September 1991 | Katz | |
| ☐ | 5073929 | December 1991 | Katz | |
| ☐ | 5128984 | July 1992 | Katz | |
| ☐ | 5218631 | June 1993 | Katz | |
| ☐ | 5224153 | June 1993 | Katz | |
| ☐ | 5251252 | October 1993 | Katz | |
| ☐ | 5255309 | October 1993 | Katz | |
| ☐ | 5259023 | November 1993 | Katz | |
| ☐ | 5349633 | September 1994 | Katz | |
| ☐ | 5351285 | September 1994 | Katz | |
| ☐ | 5359645 | October 1994 | Katz | |
| ☐ | 5418713 | May 1995 | Allen | 364/403 |
| ☐ | 5539635 | July 1996 | Larson, Jr. | |

FOREIGN PATENT DOCUMENTS

| FOREIGN-PAT-NO | PUBN-DATE | COUNTRY | US-CL |
|---|---|---|---|
| 1 225 759 | October 1984 | CA | |
| 0 249 575 | December 1987 | EP | |
| WO 87/00375 | January 1987 | WO | |
| WO 88/02966 | April 1988 | WO | |
| WO 94/06085 | March 1994 | WO | |

OTHER PUBLICATIONS

"VH1 Online Takes Vid Net to Cyberspace", Billboard, v 107, n 41, pp. 41+ Oct. 14, 1995.
"Virgin Goes On Line With Net Shopping", Music Week, p. 4, Apr. 29, 1995.
John Heilemann, "From Prime Time to My Time", Economist, v 330, n 2850, pp. SS9-SS11, Feb. 12, 1994.
Bruce Page, Ernest Perez, "Online Help for Finding the Right Software", Link-Up, v 5, n 5, pp. 14-15, Oct. 1988.
Steven J. Bell, "Bailouts and Brutal Disconnects: How to Handle Search Interruptions", Online, v 16, n 6, pp. 50-61, Nov. 1992.
Lexis Search Results (Great American Potato-Chip Giveaway/Raisin Bran Game/giants Baseball Trivia--Dial Info): "In The Chips," AdWeek, Jul. 22, 1985; "San-Fran-Police-League," Business Wire, Aug. 2, 1985; "Similar Campaigns," DM News, Dec. 15,

1985; "Phone Offers Action At Push Of Button," Advertising Age, Feb. 6, 1986; and "Pay Radio Tunes In Charities, Turns Off Some Consumer Groups," Los Angeles Times, Aug. 24, 1986.
Hester, S.D. et al., "The AT&T Multi-Mode Voice Systems--Full Spectrum Solutions for Speech Processing Applications," Sep. 1985, pp. 1-10--(Proceedings Of The 1985 AVOIS Conference).
Press Release: "Telephone Call-In Game Uses Computer Voice Interface," Dallas, date unknown.
Author unknown, "Voice-Response System Improves Order Entry, Inventory Control," Communication News, Aug. 1976.
Brochure: "Periphonics Voicepack".
Brochure: "The Voice Response Peripheral That Turns Every Touch-Tone Telephone Into A Computer Terminal," Periphonics Corporation.
Rabin, J., "Minorities Seek 30% Share Of All Lottery Operations," Sacramento Bee, Apr. 12, 1985.
Finnigan, P., "Audiotex: The Telephone As Data-Access Equipment," Data Communications, 1987, pp. 155-161.
Ozawa, Y. et al., "Voice Response System And Its Applications," Hitachi Review, Dec. 1979, vol. 28. No. 6, pp. 301-305.
Adams, C., "Conversing With Computers," Computerworld on Communications, May 18, 1983, vol. 17, No. 20A, pp. 36-44.

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PRIMARY-EXAMINER: Hayes; Gail O.

ASSISTANT-EXAMINER: Hughet; William N.

ABSTRACT:

An automated product purchasing system allows purchasers to order products via a remote communications medium without having to speak to a sales representative or other human operator. According to the invention, purchasers access the automated product purchasing system and browse among the selections offered. Menu style prompts guide the customer through the various products offered by the automated product purchasing system. Product descriptions are provided to assist the customer in making his or her selections. Where appropriate, product samples are provided to the customer via the communications medium so the customer can evaluate the product prior to purchasing. Examples of product samples include movie previews, sample cuts from music tracks, software demos, and the like. Ordering and purchasing are automated so that human operators are not required to intervene in the process. The use of a membership profile with important customer information facilitates the automation of the process and minimizes the amount of times a repeat customer needs to provide this information.

40 Claims, 47 Drawing figures

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L7: Entry 5 of 5 File: USPT Jun 29, 1999

DOCUMENT-IDENTIFIER: US 5918213 A
TITLE: System and method for automated remote previewing and purchasing of music, video, software, and other multimedia products

Abstract Text (1):
An automated product purchasing system allows purchasers to order products via a remote communications medium without having to speak to a sales representative or other human operator. According to the invention, purchasers access the automated product purchasing system and browse among the selections offered. Menu style prompts guide the customer through the various products offered by the automated product purchasing system. Product descriptions are provided to assist the customer in making his or her selections. Where appropriate, product samples are provided to the customer via the communications medium so the customer can evaluate the product prior to purchasing. Examples of product samples include movie previews, sample cuts from music tracks, software demos, and the like. Ordering and purchasing are automated so that human operators are not required to intervene in the process. The use of a membership profile with important customer information facilitates the automation of the process and minimizes the amount of times a repeat customer needs to provide this information.

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19951222

Brief Summary Text (6):
Historically, retailers provided their services in very traditional ways. In one situation, a retailer established a store where customers could visit, peruse the merchandise and make purchases. In this situation, customers had to visit the stores in order to purchase the products. This form of retailing is still one of the most prominent forms of retailing today. The evolution of this form of retailing into the shopping mall, some would argue, has provided increased convenience to shoppers in that numerous different types of products are offered "all under one roof."

Brief Summary Text (7):
A variation on this retail store theme is practiced by local street vendors. You would be hard-pressed to pass a busy urban downtown street corner without running across a street vendor. This is especially true in areas where tourists are plentiful. These vendors offer numerous products to passing pedestrians including food items, T-shirts and other miscellaneous items. Well known, of course, are the corner hot dog and pretzel vendors, whose products can be seen and smelled, but not tasted until purchased.

Brief Summary Text (11):
One form of retailing that has grown tremendously in recent times is the "shop-at-home-by-telephone" method. Using this retailing strategy, potential customers are provided with product information in the form of literature such as catalogs and fliers. Additionally, some retailers advertise by radio and television as well. When the customer determines that he or she would like to order a product, the

customer dials a toll-free number, speaks to a sales person and orders a product. The customer either provides a credit card number over the phone, mails a check or money order to the retailer, or accepts the product C.O.D.

Brief Summary Text (12):
A more recent variation of the shop-at-home-by-telephone technique is the shop-by-television technique. Home shopping services which advertise their products via the television have of late enjoyed widespread popularity. Shoppers of these services watch advertisements of the products for sale and call in to order the desired products.

Brief Summary Text (14):
The most recent retailing endeavors allow shoppers to browse through available products offered using the Internet. These services allow shop-at-home convenience without having to pick up the telephone.

Brief Summary Text (16):
Radio and television advertisements typically fail to give consumers an adequate sampling of the product. Often, products advertised on the television are shown only very briefly and are usually portrayed using ideal lighting, select camera angles and other techniques to enhance the appeal of the product. In many instances, the customer does not get an adequate appreciation for the true nature of the product. Radio advertisements for music selections usually only play the music as a background to the announcer's voice. Also, the customer is not allowed to sample other music selections, but is limited to hearing those selections advertised by the sponsors. In summary, neither radio nor television advertsing allows customers to adequately inspect products prior to purchase.

Brief Summary Text (17):
Even within retail stores there are some products which are not readily inspectable. Where a customer is purchasing clothing, toys, tools, etc. he or she has the ability to inspect the merchandise in the store before making a purchase. However, certain products that are sealed or that require a playback device, such as music, videos, video games, software, etc. typically cannot be examined. Some stores, such as music stores, video rental stores and software stores have sample selections playing for the customer to enjoy.

Brief Summary Text (21):
The present invention is directed toward an automated product purchasing and previewing system (generally referred to as an "automated product purchasing system") which allows customers to shop for and purchase products via a remote communications medium in an automated fashion. According to the invention, customers access the automated system and browse through the selections offered. This access can be achieved by any remote communications medium such as the telephone, a direct data link, a network connection (e.g., the Internet), and other communications means.

Brief Summary Text (22):
Once a customer has accessed the automated product purchasing system, the customer is permitted to browse through the offered selections and to obtain more information about particular selections in which he or she may be interested. For example, in one embodiment, music, videos, computer software, and other multimedia products are offered for sale by the automated product purchasing system. In this embodiment, users can sample portions of selected titles to determine whether or not it is a product that they would actually like to rent or purchase.

Brief Summary Text (23):
For example, where the product is movies, the purchaser can select a particular movie to preview before actually purchasing or renting the movie. In this scenario, a sample portion of the movie, or an actual preview, is provided to the customer

for his or her sampling. Where the customer is connected by a suitable medium (such as the Internet, for example), actual movie clips can be provided. However, where the customer only has voice access (such as a customer accessing the system via telephone), a description of the product (in this case a movie) is provided to the customer so that he or she can decide whether to purchase or rent the selection.

Brief Summary Text (25):
In such a telephone implementation of the system, a telephone keypad as well as voice recognition can be used to allow the customer to provide his or her inputs to the automated product purchasing system. In an embodiment where access is provided via a data link (e.g., via modem or the Internet), product information, sales information, and other information can be provided to the customer through the use of computer pages, screens or other data capable of being displayed on the customer's terminal. Customer input is provided in response by way of keyboard, touch screen, mouse entry or other suitable input means.

Brief Summary Text (26):
To facilitate automated order processing, a customer can become a "member" of the system and have a membership profile on file containing important customer information. This membership information can include data such as the customer's name and shipping address, customer preferences, and customer payment information such as credit card, debit card or other payment information. Because all this information is maintained in a membership profile, the caller need not provide this information each time he or she places an order. Instead, the system can automatically access the customer's membership information to obtain necessary payment and shipping information.

Brief Summary Text (27):
An advantage of having a membership profile established for customers, is that certain customer information need not be entered by a customer each time he or she places an order. This provides greater convenience to the customer, and also minimizes staffing requirements for the automated product purchasing system. To the extent that credit card, debit card or other payment information can be maintained for a particular customer, this minimizes the number of instances in which the customer must provide his or her payment information over the telephone, or via network data link. Thus, this minimizes the number of instances in which this sensitive information is susceptible to interception by unauthorized third parties.

Brief Summary Text (28):
According to the invention, customers are provided with the ability to browse through various selections offered by the automated product purchasing system in a number of different ways. In one scenario, a customer is provided with the ability to browse through selections based on a product name. For example, where the product is music, the customer can browse through the available selections based on the artist's name and the titles of the albums available by that artist. This form of browsing is best suited to a customer who knows which particular products he or she is most interested in purchasing.

Brief Summary Text (29):
Another form of browsing allows a customer to learn more about products which are popular or in great demand but about which the customer may not be aware. For example, again consider the music environment. A customer may know that he or she wishes to purchase one or more music albums, but does not know which albums he or she is interested in. In this instance, the customer may call or otherwise access the automated purchasing system to browse through available selections based on selections that are in a top hits list, selections by a featured artist, or other like criteria.

Brief Summary Text (31):

Shopping can also be done based on a particular category of product in which the customer may be interested. For example, in the music environments, the browsing can be accommodated according to a style of music preferred by the customer. For movies, the customer may shop for available selections in a movie category in which he or she is interested (such as drama, action, comedy, etc.).

Brief Summary Text (33):
The interface units provide a front-end interface between the customers and the automated product purchasing system. The interface units provide information to the customers relating to various products and their availability. This information is provided via the communications medium through which the customer accesses the system. In embodiments where samples of music, video, computer software or other multimedia products are offered, these samples are provided to the customers via the interface units.

Brief Summary Text (34):
The system stores important information such as customer information, order information pertaining to the customer's order, and product information. The product information can include texts describing the products and their features, and samples of the products such as music samples, video samples, and other samples as appropriate depending on the product.

Brief Summary Text (36):
The invention introduces the concept of a virtual shopping cart. The virtual shopping cart is used to hold items which a customer has selected for purchase during his or her shopping trip through the automated product purchasing system. When a customer is browsing among the various products offered and comes across a product that he or she wishes to purchase, the customer indicates that desire to the system via the interface unit. The interface unit causes that product to be "placed into the customer's virtual shopping cart." In one implementation of the invention, what this really means is that a number or other designator identifying the product selected by the customer is tagged as part of that customer's order information.

Brief Summary Text (37):
For each item placed in the virtual shopping cart, the product identification number is appended to the order information to maintain a list of products selected by the customer for purchase.

Brief Summary Text (38):
When the customer has completed his or her shopping and wishes to complete the transaction, the customer "checks out" of the automated product purchasing system. In this procedure, the customer actually completes the purchase of the items in his or her electronic shopping cart. In situations where a membership profile is established for that customer and all the payment and delivery information is on file, the customer has to do no more than verify the purchase. In other situations where information needs to be provided, this information is provided by the customer to the automated product purchasing system to complete the transaction and finalize the sale.

Drawing Description Text (11):
FIG. 8 is an operational flow diagram illustrating an example process by which a customer orders a product and that product information is transferred across a wide area network according to one embodiment of the invention.

Drawing Description Text (12):
FIG. 9 is a diagram illustrating example data type for an interface unit. Specifically, FIG. 9 illustrates example data types for an embodiment of the invention where the customer interface is via telephone, the interface unit is a voice response unit (VRU) and the product offered is music albums.

Drawing Description Text (13):
FIG. 10 is a diagram illustrating an example data structure for an embodiment where the product is music albums.

Drawing Description Text (16):
FIG. 13 is a block diagram illustrating an example hierarchy of a menu driven embodiment of the automated product purchasing system in an environment where the automated product purchasing system is used for purchasing musical title.

Drawing Description Text (20):
FIGS. 17 and 18 are an operational flow diagram illustrating example process by which a music category selected to one embodiment of the invention.

Drawing Description Text (21):
FIG. 19 is an operational flow diagram illustrating a process by which a customer samples music selections available featured artist.

Drawing Description Text (22):
FIG. 20, which comprises FIGS. 20A, 20B and 20C, is an operational flow diagram illustrating an example process by which a customer samples music available in a "type-5 hits" category.

Drawing Description Text (23):
FIG. 21 is an operational flow diagram illustrating an example process by which a customer browses selections available on a music title according to one embodiment of the invention.

Drawing Description Text (28):
FIG. 28 is an operational flow diagram illustrating a process by which a customer is permitted to sample selected cuts from a music title according to one embodiment of the invention.

Drawing Description Text (31):
FIG. 32 is an operational flow diagram illustrating an example process by which the purchase of the order is completed according to one embodiment of the invention.

Drawing Description Text (42):
FIG. 43 is a block diagram illustrating an example architecture for an automated in-store order fulfillment center.

Drawing Description Text (43):
FIG. 44 is an operational flow diagram illustrating an example process by which the automated in-store order fulfillment center operates according to one embodiment of the invention.

Detailed Description Text (5):
1.2 Telephone Automated Music Purchasing System

Detailed Description Text (22):
4.3 Music Mall

Detailed Description Text (25):
5.0 Additional Features 5.1 Browser 5.2 Virtual shopping Cart 5.3 VRU Help Mode 5.4 Review and Order Processing 5.5 Order Review 5.6 Order Processing 5.7 Shopping Time-out 5.8 Check-out Process for a Timed-Out Caller 5.9 Removing Items from the Virtual Shopping Cart 5.10 Items on Hold 5.11 System Access

Detailed Description Text (27):
7.0 Retail Store Browsing and Purchasing Systems 7.1 Remote Access by a Retail

Store 7.2 Automated Retail Outlet 7.3 Automated Order Processing Center

Detailed Description Text (30):
The present invention is directed toward an automated product purchasing and previewing system which allows purchasers to preview and order products via a remote communications medium without having to speak to a sales representative or other human operator. According to the invention, purchasers (also referred to in this document as callers and shoppers) access the automated product purchasing and previewing system (generally referred to in shorthand as an "automated product purchasing system") and browse the selections offered.

Detailed Description Text (31):
The automated product purchasing system is introduced in this Section 1.0 of the document in two embodiments. The embodiment described in Section 1.1 is a generic product purchasing system described in terms of allowing callers to preview and purchase any type of product via the telephone. The embodiment described in Section 1.2 further describes the first embodiment in terms of a specific product: music titles. Further embodiments are discussed in detail in subsequent sections of this document.

Detailed Description Text (32):
After reading the description of the embodiments of the invention as provided in this document, it will become apparent to a person skilled in the relevant art how to implement the invention for a system providing automated purchasing for virtually any type of product and over virtually any type of communications medium. The embodiments describing sales of music titles and describing access via a telephone connection are provided as a reader's aide to assist the reader in better visualizing the invention in a real-life example implementation. It should be noted that while virtually any type of product may be offered using the automated product purchasing system, certain features of the system make it particularly useful for vending audio, video, computer software and other multimedia products.

Detailed Description Text (35):
In a script-based embodiment of the invention, scripts are used to provide the purchaser with price, availability and delivery information on a browsed product so that the purchaser can decide whether to actually purchase the product. If the purchaser decides to purchase a product, this is done by a simple keypad entry. If the purchaser is a "member" of the purchasing service, the purchaser has a profile on file which indicates the pertinent information such as the purchaser's delivery address, shipment preferences, credit/debit card or billing information, and other like information. Because the information required to complete the sale is contained in the purchaser's membership profile, the purchaser need not speak to a human operator to complete the sale. Thus, the process is fully automated.

Detailed Description Text (36):
In one embodiment, if the purchaser is not a member, the purchaser is still permitted to browse the available product listings, listen to or view product descriptions and sample product offerings. The non-member purchaser can even purchase products. However, because a non-member does not have a membership profile, the non-member will speak to a sales representative to complete the sale. At this time, the sales representative obtains payment and delivery information from the purchaser to complete the sale. If the purchaser desires, this information can be entered into a membership profile for that purchaser, allowing the purchaser to purchase products in the future without having to speak to a sales representative.

Detailed Description Text (38):
1.2 Telephone Automated Music Purchasing System

Detailed Description Text (40):

To further illustrate the embodiment, it is described in terms of a remote, automated music previewing and purchasing system. The remote music purchasing system allows purchasers (referred to as callers in the telephone embodiment) to listen to samples of various music titles before making their selections. This music purchasing system (or service) embodiment is now briefly described.

Detailed Description Text (41):
According to the music purchasing system embodiment of the invention, a caller dials a telephone number to access the service. Preferably, the caller dials an 800 telephone number to access the service, but caller-paid numbers could also be used on either a per call or a timed call basis. Once connected, callers can browse through available music titles and hear samples of particular music titles in which they are interested. The browsing is facilitated by scripted menus which prompt the caller and guide him or her through the available titles. The caller may elect to browse by music category, by artist name, or by other artist, title, or music attributes.

Detailed Description Text (42):
If the caller elects to browse by music category, the caller can choose the kind of music he or she is interested in sampling. The various music styles that may be offered can include rock, alternative music, country, urban, rhythm & blues, classical, rap, and other styles. Based on the style of music selected by the caller the user is provided with the ability to listen to featured artists, top artists and titles, local favorites and other selections featured in their selected style.

Detailed Description Text (43):
In one embodiment, some of the samplings offered to the caller are based on the caller's geographic area. In this embodiment, the system determines the location from which the caller placed the call and plays for the caller a script of a disc jockey from one of the local radio stations to offer the caller further choices. For example, if the call is placed from the Baltimore/Washington area and the caller's preference is Alternative Music, a DJ from WHFS (a local alternative music radio station) offers the caller choices of music to sample. These choices can include, for example, a featured artist, a radio play featuring the week's top hits from that radio station, and top-selling albums in that area, among other choices. The caller can select to hear samples of music from each of these categories. In one embodiment, the caller is also provided with the option of hearing selections from the top-selling albums nationwide.

Detailed Description Text (44):
In some embodiments, the caller may be provided with the option of hearing selections from special promotional titles, nationwide featured artists, artists touring in the caller's geographic area, etc. The possibilities of categories in which titles may be organized for browsing are not limited by the purchasing system. The organization of categories for browsing can be determined based on business and marketing considerations. In other words, the system can be set up to allow the caller to browse through music in any manner that readily provides him or her to hear with the ability to sample titles in which the caller is most likely to be interested.

Detailed Description Text (45):
As stated above, in one embodiment the caller is provided the ability to listen to sample music selections by artist and title. The samples may include every track on an album, a selection of tracks from each album, or even a single track from an album. This feature is referred to as a Music Mall. In the Music Mall, callers can browse through the entire music inventory of the purchasing system. In the Music Mall, callers can choose what music they want to sample by categories such as, for example, Artist, Album Title, Catalog Number, Top-Selling Albums, and Specials. When the caller first connects with the music service, the caller is provided an

audio menu by which he or she can make various selections. For example, the caller could choose to enter the Music Mall directly, where music titles can be purchased by Artist, Catalog Number, etc. Alternatively, the caller could choose to sample music featured by a local radio station, or top-selling albums in a particular style of music.

Detailed Description Text (46):
At any point during the call, whether sampling by category or whether shopping in the Music Mall, the caller can elect to purchase a title that he or she desires. When the caller determines the title he or she desires to purchase (either by sampling or otherwise), the caller simply enters a keypad keystroke.

Detailed Description Text (47):
Regardless of the manner chosen, the caller is ultimately given the ability to preview products in a manner, and to a degree, not normally provided by retail stores, or by other retail techniques, in a manner which is most convenient to a caller. In addition to provided callers with the ability to select and preview titles, the level of preview can be varied. In some situations, callers may only be allowed to listen to ten or fifteen seconds of a selection. However, in other situations, callers could have the ability to select longer play times. They could even be permitted to listen to entire songs during times of light call volume. The decision as to the length of sampling provided can be based on a number of parameters, such as for example call volume, whether the caller is a frequent purchaser or usually only a "window shopper", and other considerations.

Detailed Description Text (48):
In one embodiment, the caller's purchase is not final at this time, but is a pending purchase. In this embodiment, the title selected is said to be placed in the caller's virtual "shopping cart." At this point, the caller may choose to cancel the order, close the transaction by completing the purchase of the title in the virtual shopping cart, or continue to shop for additional titles. Additional titles can be added to the virtual shopping cart at any time during the call and titles no longer desired can be removed.

Detailed Description Text (49):
When the caller has finished shopping, he or she can complete the purchase, again using DTMF keystrokes. According to one embodiment, where the caller is already a member of the music service, this order can be completed automatically, without ever having to speak to a human operator. If callers are not members, or, alternatively, if they wish to speak to a representative, the order can be completed through a live music representative.

Detailed Description Text (50):
Members receive their own membership number and a personal identification number, or PIN. Account information is stored for each caller based on that caller's membership number. The personal identification number ensures that only the member has access to his or her information. Once a caller has established a membership account, caller information such as name, address, shipping preferences, credit card information, and the like, can be stored in the customer's membership profile. Thus, for existing members already having established membership profiles, an order can simply be placed by entering the membership number and PIN. The caller need not provide his or her name, address, and credit card information each time a product is ordered. This greatly streamlines the ordering process.

Detailed Description Text (51):
In one embodiment, to ensure secrecy with regard to the member's credit card information or other sensitive information, this sensitive information is masked from operators if they pull up membership information onto their screen. When an account is initially set up, the sales and service representative needs to know the credit card number and expiration date to enter it into the membership profile.

But, because the credit validation and order processing steps are automated in several embodiments as described below, a sales and service representative need not access this information each time an order is placed. This minimizes the exposure a caller has to possible theft of his or her credit information.

Detailed Description Text (52):
Additionally, through the use of a membership profile, the shopper need not provide his or her credit card number (or other payment information) each time an order is placed. This minimizes the number of times a credit card number is spoken over the telephone, transmitted over the Internet, or otherwise transmitted to the shopping service. Thus, there are fewer opportunities for an unscrupulous third party to "tap" that information and misappropriate the shopper's credit information.

Detailed Description Text (53):
In summary, according to the invention, callers have the opportunity to sample a variety of different music selections and make those selections over the phone quickly and easily. For callers who know the artists in whom they are interested, they may simply choose to browse selections available by that artist in the Music Mall. Alternatively, for callers who are uncertain as to a particular artist, but who may know that they are interested in what is currently popular, or a top-selling artist, they may choose to browse based on music type and based on the selections offered by their local radio station or by a list of nation-wide top-selling albums.

Detailed Description Text (54):
The above description outlined various features and functions of the purchasing system in terms of an embodiment where the product offered is music (albums, CDS, cassettes, etc.). As stated above, the features and functions described in this music embodiment can be applied to other embodiments where other products are offered for sale. In fact, because the system allows portions of the product to be previewed by the shopper, the system lends itself particularly well to the sale of products such as videos (movies and movie rental, video-on-demand, educational programming, etc.), video games, computer software and other multi-media products. Using the previewing feature, the shopper can sample portions of the album, movie, video game, software, etc. before the decision is made to purchase or rent the product.

Detailed Description Text (55):
This provides the customer with great flexibility in making his or her shopping decisions. Note that in situations where the product is a multi-media product other than music, the sampling capabilities are limited using the telephone. Thus, these products are better vended in an embodiment where a computer system (instead of the telephone) is used as the means by which the shopper accesses the system. Such access can be provided via direct dial-up, network or Internet access, or other computer connection means.

Detailed Description Text (56):
Note that callers may not be able to "sample" other products in the way that music and other multi-media products can be sampled. However, the telephone-based embodiment of the system can provide the caller with a brief description of the products offered. Such descriptions can include the product features, uses, sizes, available colors, warranty information, and other product information a shopper may find useful when making a purchasing decision. Visual-based systems can provide graphics, text and other visual interactive preview techniques.

Detailed Description Text (58):
In this document the term "browse" and its conjugates are used with two meanings. In some instances the term is used to describe the concept of shopping using the automated product purchasing system and to highlight the system capability of allowing a shopper to look through and sample (or otherwise obtain information

pertaining to) the available products. In another instance, the specific term "browser" is used as a noun to define a set of samples of songs from a music album. The meaning of the term in a particular instance is readily apparent from the context in which it is used.

Detailed Description Text (62):
Interactive transaction database 112 provides support to interface units 104 and customer service center 108 by maintaining, and in some embodiments generating, data needed to support the automated product purchasing system. Examples of this data can include geographic information, customer information, order information and other system-related information. As illustrated in the example architecture of FIG. 1, interactive transaction database 112 is a stand-alone database server. In an alternative embodiment, interactive transaction database 112 is a database resident in interface units 104.

Detailed Description Text (63):
Also included in the example architecture is an order fulfillment center. The order fulfillment center is the center that is actually responsible for filling the customer's order and sending the order to the customer. In one embodiment, the order fulfillment center is a third-party vendor contracted to maintain an inventory of products and to fulfill customer orders based on order information provided by the interactive transaction database 112. In another example, the order fulfillment center is an in-house order processing center responsible for filling customer orders. In yet another example, the order fulfillment center is an automated order fulfillment center comprising an automated order picker to automatically retrieve ordered products from inventory to fill customer orders.

Detailed Description Text (67):
Additionally, in this and subsequent embodiments described in terms of the telephone environment, the customer is referred to as a "caller" 182. This is done for ease of description only and is not intended to limit the use of the automated product purchasing system to customers accessing the system via other means such as network users, Internet browsers, and other user types.

Detailed Description Text (69):
FIG. 2 is an operational flow diagram illustrating in general the operation of the automated product purchasing system according to one embodiment of the invention. This description is provided in terms of a music ordering service that allows shoppers to access the service via telephone, browse music selections and order titles via an automated process, twenty-four hours a day. Because this embodiment is described in terms of a telephone purchase, the shopper is referred to as a caller 182.

Detailed Description Text (76):
In one embodiment, the menu scripts played to caller 182 at the beginning of the call prompt caller 182 to enter a membership number. If caller 182 does not have a membership number or if he or she simply wishes to browse without entering a membership number, caller 182 is prompted to enter a keystroke (such as the pound (#) key) to access the system without a membership number. In this embodiment, non-members are permitted to listen to music samples. Alternative embodiments may be implemented where access is denied to a caller 182 without a membership number, or access is provided on a more restricted basis, such as, for example, by limiting the number of selections that can be previewed or limiting the time permitted for the call.

Detailed Description Text (77):
As stated above, in step 214, the scripts played to caller 182 provide caller 182 with a menu allowing him or her to select from a number of choices. According to one embodiment, the first choice provided to caller 182 is the style of music for which he or she wishes to shop during that call. This style could be rock, jazz,

pop, alternative, rap, etc. Upon selecting a style, the caller is further provided with the option to hear samples of titles from various categories in the selected style of music. The categories can include: featured artist for the local radio station, top hits from that station, the radio station play list for recently played songs, or to hear the top hits nationwide.

Detailed Description Text (85):
In one embodiment, when the caller purchases a title, the information is provided to interactive transaction database 112, as illustrated by step 234. In this embodiment, interactive transaction database 112 keeps track of the titles ordered by caller 182. The order can be tracked using an order number. The order number can be based on the membership number, ANI, a sequential number list, a random number, etc.

Detailed Description Text (86):
During the operation described above, any of the titles selected by caller 182 in step 232 can be canceled from the caller's order. Alternatively, caller 182 may choose to finalize the purchase of the selected titles.

Detailed Description Text (90):
In one embodiment, the browsing feature allowing callers 182 to listen to music samples is available to non-members as well as members. In this embodiment, it is not required that caller 182 enter a membership number in response to the request made in step 208. Thus, where caller 182 does not enter a membership number upon entry into the system, that caller 182 is again prompted for a membership number to complete the purchase transaction.

Detailed Description Text (92):
If a membership number is provided at some point during the process, the order processing continues at a step 308. In one embodiment, membership number is verified. Such verification can be performed, for example, by verifying the membership number against the entered PIN.

Detailed Description Text (93):
In a step 308, interactive transaction database 112 processes the order. In one embodiment, interactive transaction database 112 maintains a membership profile for caller 182. This membership profile is maintained in one embodiment based on the membership ID number. This membership profile can include information such as, delivery preferences, music style preferences, shipping address, credit card information and other like customer information. Because all this information is maintained in the membership profile, interactive transaction database 112 can process the purchased items without the member having to speak with an operator. The processing is done automatically based on the selections made by caller 182 prior to the time that the order was finalized.

Detailed Description Text (95):
In a step 316, order information is sent to customer service center 108 as well. Preferably, this occurs at roughly the same time that the caller 182 is being transferred to customer service center 108. In this manner, the sales and service representative receives the caller's order information at the time the representative is connected to caller 182.

Detailed Description Text (96):
Once customer service center 108 has received the data transfer and is connected with caller 182, in a step 320, caller 182 works with the sales and service representative to establish a new account for caller 182, or to pay for the product without establishing an account. Once an account is established or the order paid for, the operation returns to step 308 where the order is processed in interactive transaction database 112. Once an account is established for a caller 182, the caller is issued a membership ID. In one embodiment, with the establishment of an

account, caller 182 is sent a membership packet which can include, for example a product catalog.

Detailed Description Text (111):
To achieve high performance requirements of a real-time interactive system, VRUs 104 utilize a multi-threaded operating system. Further, VRUs 104 can be provided with adequate RAM and disk caching to ensure that music selections are first cached to memory before being played to interested callers. The amount of RAM installed and the amount of cache space will vary depending on the application. In one embodiment, 16 megabytes of RAM and 16 megabytes of cache are used. This allows VRUs 104 to be responsive to caller 182 and to allow voice scripts and music samples to be played to caller 182 in a virtually seamless manner.

Detailed Description Text (117):
The example architecture allows for updating VRUs 104 via local area network (LAN) 408. In this manner, an operator is not required to replace hard drives on individual VRUs 104. A down load from a server on the LAN 408 allows new music selections and voice application updates to be easily loaded onto VRU 104.

Detailed Description Text (127):
Depending on specific marketing requirements, in-bound call queuing can be implemented at sites 460 to allow callers to wait in turn for available ports. During the waiting time, callers can be reminded to have certain order information available using standard ACD messaging capabilities. Alternatively, or additionally, callers can be informed of certain specials or promotions in advance of their access into the service. This time can also be used to provide advertisements of products to the client. Thus, the automated product purchasing system could provide advertising or other information for it's own purposes or the available time could be sold to third parties to convey their messages to the shoppers.

Detailed Description Text (128):
For calls that are to be routed to customer service center 108, these calls are transferred by ACD 434 supporting the VRUs 104 transferring the call. In one embodiment, ACD 434 is configured with DS3 circuits connected to the switch of customer service center 108. In one embodiment, for calls being transferred, VRUs 104 transfer the call to customer service center 108 using a standard hook flash, transfer sequence. However, in one embodiment, VRU 104 will not complete the transfer until a sales and service representative actually answers the call. At that time, in one embodiment, VRU 104 uses WHISPER technology to silently inform the sales and service representative of the order number for the caller and then complete the transfer allowing the call center representative to handle the call.

Detailed Description Text (140):
When information about a caller's order needs to be transferred to customer service center 108 along with the phone call, this information is provided by site 460. In one embodiment, WHISPERCOM technology is used to transfer an order between VRU 104 and customer service center 108. In an alternative embodiment, computer telephony integration (CTI) technology is used to coordinate data with the transferred call so that the appropriate data is transferred from interactive transaction database 112 to customer service center 108.

Detailed Description Text (141):
In this CTI embodiment, the information "pops up" on the screen of the customer service representative when the call is delivered to customer service center 108. CTI technology can include features such as pop-up screen displays and screen prompts that provide pertinent information to the sales and service representative. Such pertinent information can include information about the caller and the status of his or her order as well as information pertaining to the offered products and their price, availability and delivery information.

Detailed Description Text (143):
For embodiments using Internet or other data access, the establishment of a membership account can be done in a wholly automated fashion without need for a representative to speak to customer 182. Al of the pertinent information can be provided via the data connection (via Internet or other data connection) and downloaded into interactive transaction database 112.

Detailed Description Text (147):
Reporting database 438 maintains transaction information relating to usage of the service. Although reporting database 438 could be implemented using any of a variety of computer platforms (e.g., Windows.TM., Unix.TM., etc.), in one embodiment reporting database 438 is based on the RS/6000 transaction server platform to maintain commonality of platforms. Transaction information maintained on reporting database 438 can be downloaded periodically for reporting purposes to interactive transaction databases 112.

Detailed Description Text (148):
Data stored in reporting database 438 can be used to generate reports to track usage and to assist marketing and other personnel in operational and performance decisions. All available information can be maintained in a reporting database and can include information such as browsing and purchasing statistics for a particular caller (based on ANI or membership ID), browsing and purchasing statistics by region, statistics by music style, etc. The various reports that can be generated are limited only by the amount and types of data that the system architects choose to maintain in reporting database 438. Note that these statistics and other information can be maintained on interactive transaction database 112, thus obviating the need for reporting database 438.

Detailed Description Text (150):
As described above with reference to FIG. 1, an order fulfillment center is provided in one embodiment to fill the customer order. One example of an order fulfillment center is fulfilment vendor 436, which, according to the example architecture is separated from the rest of the automated product purchasing system via wide area network 412. When an order is completed by a customer it is sent to fulfillment vendor 436 for fulfillment of the order. Fulfillment vendor 436 receives the order via wide area network 412 and processes and ships the order. Fulfillment vendor 436 can be an actual part of the automated product purchasing system, or alternatively, fulfillment vendor 436 can be an independent service contracted to perform order fulfillment-related services such as warehousing, inventory control and shipping functions. In one embodiment, fulfillment vendor 436 is an independent contractor.

Detailed Description Text (151):
Inventory updates to reflect new stock received and orders shipped are provided to interactive transaction database 112 via wide area network 412. In this manner, local instances of inventory information can be maintained within interactive transaction database 112, without the need for VRU site 460 to retrieve data from across the WAN 412 each time availability information is needed. As a result, when a caller 182 chooses to sample a particular title, interactive transaction database 112 can provide VRU 104 with availability information without the need to query fulfillment vendor 436 for each call. The inventory updates can be performed periodically (e.g., daily, weekly, hourly, etc.) depending on the system requirements.

Detailed Description Text (167):
Note that a dual router configuration is implemented for both WAN routers 708 and hub routers 712. These are implemented as a primary and a backup data path. The functioning of the primary and backup data paths are rotated on a timely basis in order to exercise the backup data paths to verify functional integrity. The band

width showing across the data paths is optional.

Detailed Description Text (174):
The wide area network architecture depicted in FIG. 7 and described with reference thereto is now described in terms of an operational scenario in which a caller 182 orders a product. FIG. 8 is an operational flow diagram illustrating the process by which caller orders a product and that data is transferred across wide area network architecture as illustrated in FIG. 7.

Detailed Description Text (176):
In a step 808 caller 182 enters his or her membership identification number and orders one or more titles.

Detailed Description Text (177):
In a step 812, order data identifying the caller's selections and the caller's membership number are transferred to interactive transaction database 112. In one embodiment as illustrated in FIG. 4, interactive transaction database 112 is collocated with VRU 104 at VRU site 460. According to one alternative embodiment, interactive transaction database 112 can be implemented using a transaction server such as transaction server 718. In this embodiment, access to interactive transaction database 112 is accomplished by routing the information from router 708 across T1 connection T1/2 through hub router 712 and across local area network 712 to transaction server 718.

Detailed Description Text (179):
In a step 818, once the payment information has been verified, the order can be transferred to the fulfillment vendor 436 to fulfill the order. Where a fulfillment vendor 436 is an external vendor, transaction server 112 transfers the order data via gateway router 714 to fulfillment vendor 436.

Detailed Description Text (180):
In a step 820, interactive transaction database 112 is updated at the time of order fulfillment. This update is provided by fulfillment vendor 436 to interactive transaction database 112 via gateway router 714.

Detailed Description Text (182):
In order to enable automated product purchasing system to respond to browse and order queries, certain information can be maintained at VRU 104 and at interactive transaction database 112. The organization of data types according to one embodiment of the invention is illustrated in FIGS. 9 and 12. The data structure described herein is provided as one embodiment only. It will become apparent to a person skilled in the relevant art how to implement VRU 104 and interactive transaction database 112 using alternative data structures.

Detailed Description Text (185):
Generic system scripts are stored in VRU 104. Generic system scripts are the scripts used to walk caller 182 through the menu selections, so the caller 182 can browse the selections. Generally, generic system scripts do not change with changes in the titles and styles offered by the automated product purchasing system. For example, the generic system scripts may be the scripts that welcome caller 182 to the automated product purchasing system, that prompt caller 182 for membership information, that prompt caller 182 in completing an order, ordering a title, or deleting an order title from an existing order. Generic system scripts are stored in a data file or database on VRU 104, called up, and played to caller 182 at the appropriate time.

Detailed Description Text (187):
Also stored at VRU 104 are the music samples. Music samples are portions of titles offered for sale by automated product purchasing system. Music samples are typically brief highlights of the tracks on the titles offered by the automated

product purchasing system. In one embodiment, each music sample is a file of digital data representing a music sample. In this embodiment, there is one file for each sample from each title.

Detailed Description Text (188):
According to one embodiment, music samples can be described as comprising two categories: browsers and teasers. A browser is a string of separate samples of songs from a single album. A teaser is a sample of a single song from one album. For example, where a top-five list is compiled for caller 182 to sample, the caller 182 is played a series of teasers: one sample from each of the five tracks that make up that top-five list. Caller 182 may decide that he or she likes a particular track on the last teaser and hear samples from other songs on that album, or "browse" the album.

Detailed Description Text (191):
In one embodiment, music samples are stored with identifiers based on the catalog ID number 1008. For example, a browser providing a sampling of the songs on the title "The Wishing Chair" in this embodiment is given a filename, 10060001.vox. Thus, when VRU 104 plays a browser for a selection having a given catalog ID number 1008, VRU 104 simply retrieves the filename [catalogid].vox. This simplifies data retrieval within VRU 104.

Detailed Description Text (197):
Interactive transaction database data types are listed in FIG. 12 according to one embodiment of the invention. These data types include mapping information, customer information, order information, commission information, tax calculation data, credit calculation data, and profiling/cost statistics information.

Detailed Description Text (200):
Customer information in the interactive transaction database 112 is referred to in this document by the moniker "membership profile." Customer information stored in a membership profile can include information pertaining to a particular customer's shipping information, billing information, music preferences and other relevant customer information. The membership profile is maintained in interactive transaction database 112, and is not generally required to be accessed by VRU 104.

Detailed Description Text (201):
In one embodiment, customer information is initially provided by caller 182 to a sales and services representative in customer service center 108. This information is downloaded from customer service center 108 to interactive transaction database 112. When a caller 182 completes an order, interactive transaction database 112 uses information in the membership profile to verify or validate the payment information, and sends the order along with delivery information obtained from the membership profile to the fulfillment vendor 436. Thus, it is not necessary in this embodiment that VRU 104 access the membership profile. Caller 182 can request changes to his or her profile via the sales and service representative at customer service center 108.

Detailed Description Text (204):
Interactive transaction database 112 also maintains order information. Order information is simply a list of all the titles ordered by the caller 182. Order information preferably also includes an identification of the caller 182 such as the caller's ANI or the caller's membership number. Each time caller 182 indicates that he or she wishes to purchase a title, the catalog ID number for that title is appended to that caller's order information. If caller 182 later decides that he or she does not wish to purchase that title, that catalog ID number 1008 can be deleted from the order information list. Once the order is completed, the order information list can be sent to fulfillment vendor 436 to fill the order.

Detailed Description Text (205):

In one embodiment, the order information maintained in interactive transaction database 112 embodies a "virtual shopping cart" where titles being purchased by caller 182 are kept until he or she is done shopping and finalizes the purchase by "checking out."

Detailed Description Text (207):
Commissions information is information used to identify commissions that may be paid to a radio station or another third party in conjunction with sale of a title. For example, in one embodiment, when a caller 182 places a call to the automated product purchasing system, enters a music style, and purchases a title, the radio station associated with that music style in the caller's geographic area (as determined by the mapping information) can be designated to receive a commission from the completed sale. The commissions information included in interactive transaction database 112 may include information such as the radio stations participating in the commissions program and the commission that they receive, be it a flat rate or a percentage of the sale.

Detailed Description Text (208):
Commissions can be automatically calculated by interactive transaction database and used to trigger payment of a commission to the appropriate third party. For example, each time the sale of a title results in a commission to a particular third party, that commission can be calculated and stored as commissions information in interactive transaction database 112. Additional commissions can be added to that commission information for that particular third party. At periodic intervals, the information can be downloaded to or retrieved by the appropriate entity responsible for determining those commissions. Thus, commissions can be automatically calculated and maintained on a cumulative basis for each third party.

Detailed Description Text (210):
Interactive transaction database 112 also maintains tax calculation information. The tax calculation information allows the appropriate sales tax to be computed for each sale of a title. An on-line sales tax server calculates sales tax for any location in the United States. Sales tax rates vary across the United States, as do the way sales tax is calculated and the types of items that are taxed. Sales tax typically is based on the ship-from and ship-to locations. The ship-from location is the place from which an order is shipped, for example, the location of a fulfillment vendor 436. The ship-to location is the location to which the order is shipped, such as the customer's shipping address. Sales tax typically uses the ship-to location for determining the tax rate. In some instances, the ship-from location is also used. Information pertaining to both the ship-from and ship-to location, as well as the tax rates, are included in the tax calculation information. Additionally, it is important to note that some jurisdictions charge sales tax on shipping and handling charges, while others do not. Therefore, this information is also included in tax calculation information.

Detailed Description Text (211):
Tax calculation information also includes a tax register record. The tax register record contains all information needed to report sales tax charges for payments to the various states. A tax register record is returned from each call to the tax function. Because sales tax is only paid to the states after a product is shipped, tax calculation information may have to refer to completed order information provided by fulfillment vendor 436.

Detailed Description Text (212):
Periodically, sales tax reports are generated listing sales taxes that are due to each jurisdiction from orders that have been shipped during the reporting time. These reports are generated based on the information maintained in the tax calculation information.

Detailed Description Text (214):
Profiling information and cost statistics are also maintained by interactive transaction database 112. Profiling information can include profiles on individual callers 182 and profiles on callers in general, callers in particular music categories, or callers from a particular geographic area, and so on. Profiles can include statistical information such as preferred music styles, quantity and frequency of browses, quantity and frequency of purchases, types of purchases, responses to promotional offerings, whether purchases are from the Music Mall or from other categories such as top-hits list, featured artist, play list, etc. This profiling and statistical information can be used to enhance the system functionality, and can be used by marketing professionals to improve the marketability of the products offered by the automated product purchasing system.

Detailed Description Text (218):
A feature of automated product purchasing system is that it allows callers 182 to purchase products such as music titles via telephone without the need to speak with a live sales representative. This service can be made available to customers 24 hours a day, seven days a week. In one embodiment, automated product purchasing system is a scripted-menu-based system where a caller 182 is prompted through the operations of perusing various titles, listening to sample cuts from one or more of those titles and ordering titles he or she is interested in. The prompts are provided through the use of scripted menus played by VRU 104.

Detailed Description Text (220):
As stated above, callers accessing the automated product purchasing system can browse through available music selections to create their order. FIG. 13 is a diagram illustrating a high-level hierarchy of the menu-driven options provided in one embodiment of the automated product purchasing system. Box 1304 illustrates entry of caller 182 into the automated product purchasing system. In this step, caller 182 connects to VRU 104. Upon entry, the caller is first provided with a main menu 1308. In one embodiment, main menu 1308 introduces the service, asks the caller 182 for a membership ID, and provides caller 182 with options to begin shopping. One of the options provided to the caller 182 is to select the style of music which he or she wishes to browse.

Detailed Description Text (221):
Once the caller has selected a music style, the caller can choose to hear selections from a featured artist, a radio play list, top-selling albums. Alternatively, caller 182 may choose to shop by artist name or catalog identification. If the caller chooses this alternative selection, he or she enters the "Music Mall". These selections are illustrated by hierarchy level 1312. If caller 182 decides to enter the Music Mall, caller 182 may choose to shop by artist, shop by catalog number, shop based on special or promotional items, and shop by top-selling albums. These selections are illustrated by hierarchy level 1316. Alternative embodiments may include a different menu hierarchy and different selections at each level, to tailor user shopping, to a particular product or market.

Detailed Description Text (222):
In the above-provided descriptions, high-level discussions of processes followed by a caller 182 and the automated product purchasing system in shopping and completing a sale are generally described. A detailed process followed in allowing a caller 182 to browse the selections and order items is now described.

Detailed Description Text (226):
Once caller status is determined, the VRU 104 next optionally determines whether any items are on hold from a previous call. This occurs in a step 1412. In other words, in this step, it is determined whether this particular caller, 182, was in the process of ordering selections during a previous phone call which was terminated before the order was completed. If there are items on hold, in a step

1416, the status of those items is determined. This status may result in those held items being maintained in a current order, or deleted. For example, VRU 104 may prompt the caller to either put the selections which are on hold back into the virtual shopping cart or to delete the selections from the list of items on hold.

Detailed Description Text (228):
The format selection process is illustrated in FIGS. 15 and 16. Referring now to FIG. 15, in a step 1504, VRU 104 plays a script asking caller 182 to enter the preferred music format. An example script prompts caller 182 to enter a keypad keystroke corresponding to the appropriate format selection. For example, to follow the embodiment illustrated in FIG. 15, the script may prompt caller 182 to:

Detailed Description Text (233):
In the embodiment described herein, format selection is done before caller 182 is allowed into the system to browse through the available selections. In this embodiment, browsing is performed based on the music style selected unless caller 182 opts to shop via some other attribute such as artist name, title, catalog identification, and the like. Alternative embodiments can include embodiments where the format selection is not required before browsing begins.

Detailed Description Text (234):
FIGS. 17 and 18 are operational flow diagrams illustrating the music selection process that occurs after the format selection has been made. Referring now the FIG. 17, once the format selection has been made, the caller 182 is provided with a main menu by VRU 104. In one embodiment, before the main menu script is played, VRU 104 first determines whether this is the first time that caller 182 is at the main menu for this call. This is illustrated by decision step 1704. If this is the caller's first visit to the main menu for this call, VRU 104 optionally plays a radio station introduction script as illustrated by step 1706.

Detailed Description Text (237):
In a step 1714, a simple introductory script can be played. In one embodiment, this script is simply a promotional script for the automated product purchasing system service that introduces the automated product purchasing system. In addition, it may be advantageous to provide the caller with generic instructions at this time. For example, the caller can be instructed that to purchase the music he or she is hearing at any time, simply press a particular key. An example of this script may be:

Detailed Description Text (238):
To purchase the music you are hearing at any time, just press 6.

Detailed Description Text (243):
Press one to hears songs by this week's featured artist, [featured artist's name inserted here]. Press two to hear selections from this week's top five hits. Press three to hear selections from this week's top twenty nationwide hits. Or, press four to enter the Music Mall and shop for your favorite albums by artist name or catalog number.

Detailed Description Text (244):
The keystrokes entered by caller 182 in response to the menu are illustrated by input steps 1708A through 1708C and 1808A. In response to the DTMF tone resulting from the caller's selection, VRU 104 jumps to a portion of the process that allows caller 182 to browse music selection in the area he or she selected. This is illustrated by process steps 1716A through 1716C and 1816A. Additionally, VRU 104 may play a script to caller 182 announcing to the caller the selection that he or she has made. For example, if the caller enters the keystroke "1" to select the "featured artist," VRU 104 may play a script to caller 182 announcing, "You have selected this week's featured artist, Tom Petty."

Detailed Description Text (246):
The music samples played for caller 182 will likely vary depending on whether caller 182 selected the featured artist or one of the top hits selections. If caller 182 selected the featured artist, the operation continues by allowing caller 182 to listen to sample selections by the featured artist. FIG. 19 is an operational flow diagram illustrating a process by which the automated product purchasing system allows caller 182 to sample songs from a featured artist according to one embodiment of the invention. Referring now to FIG. 19, in a step 1904, VRU 104 plays a script for the featured artist introduction. This featured artist introduction can include several scripts to introduce the artist, introduce one or more titles featured by that artist, and provide availability, price and delivery information for featured titles. As described above, in one embodiment, availability, price and delivery information are retrieved from interactive transaction database 112 and played to caller 182 by VRU 104.

Detailed Description Text (247):
In a step 1908, VRU 104 plays the segments from the featured artist songs. When all the songs have been played, as illustrated by decision step 1912, VRU 104 plays a script announcing that all the songs from that title have been played. This is done in a step 1916. If caller 182 has not made any purchases, the operation continues back at the main menu (step 1704 of FIG. 17), as illustrated by a step 1920. Once at the main menu, caller 182 can then select alternative choices. Of course, in accordance with embodiments described above, caller 182 may always choose to return to the previous menu or exit the system at any time.

Detailed Description Text (248):
While the featured artist songs are playing, as illustrated by step 1924, caller 182 can enter keystrokes as originally prompted by the script played in step 1714. For example, caller 182 can hit the pound (#) key to return to the main menu, as illustrated by input step 1928, or the "6" key to order the title from which the song is being played, as illustrated by input step 1932. If caller 182 elects to return to the main menu, the operation continues again at 1704, as illustrated by process steps 1930 and 1934.

Detailed Description Text (249):
However, if caller 182 elects to order the title sampled, VRU 104 adds this title to caller 182's order. Recall that in one embodiment, the order is maintained in interactive transaction database 112. In this embodiment, information identifying the title ordered is added to the order data for this particular caller. Also recall that in one embodiment briefly introduced above, when a title is ordered by caller 182, that title is placed in the caller's virtual shopping cart and the purchase is not finalized until caller 182 electronically "checks out of" the automated product purchasing system. One or more embodiments of this virtual shopping cart concept are described in further detail below with reference to FIGS. 29, 30 and 36.

Detailed Description Text (251):
The operation then continues at a step 2012, where a top-five introduction script is played. The top-five introduction script introduces the top five songs for that radio station. In a step 2014, VRU 104 plays segments from the top five songs, announcing the artist and title for each song. In accordance with a data structure embodiment described herein, this is accomplished by stringing together (or retrieving and playing in sequence) files containing: the recorded music segment to be sampled, an announcement of the artist's name, and an announcement of the title. In one embodiment, no price or delivery information is announced as the top five songs are being played.

Detailed Description Text (252):
While the songs are playing, VRU 104 is ready to accept input keystrokes from caller 182, as illustrated by process step 2018. In one embodiment, standard

scanning keys can be defined to allow caller 182 to scan through the selections being played. For example, these scanning keys can allow caller 182 to scan forward or backward in the list, look for additional songs from a particular title, return to the main menu, and, of course, order a title. The use of these standard scanning keys need not be limited to top-hits scanning, but can be used where caller 182 is sampling more than one selection.

Detailed Description Text (253):
These scanning keys are now described in greater detail with reference to FIGS. 20A, 20B and 20C. In one embodiment, caller 182 can scan back to a previous song played in the song list, scan forward to the next song on the song list, sample additional songs, return to the main menu, or depress the order key to purchase the selection. These input keystrokes are illustrated by input steps 2028A through 2028E.

Detailed Description Text (254):
When caller 182 depresses scan keys as illustrated by input steps 2028A and 2028B, VRU 104 skips either forward or backward to the previous or next song on the song list, as illustrated by process steps 2031 and 2032.

Detailed Description Text (255):
If caller 182 selects the "sample more" selection as illustrated by input step 2028C, VRU 104 determines the title asscciated with the song playing while caller 182 has made that selection, as illustrated by process step 2036. In a step 2040, VRU 104 retrieves additional music samples from that title so that these samples can be played for caller 182. In one embodiment, this is accomplished by invoking an album browser process allowing caller 182 to browse (sample) selections featured on that title. An example album browser process is described in detail below with reference to FIG. 28.

Detailed Description Text (256):
If caller 182 selects an input key requesting to return to the main menu (process step 2028D), the process continues back at step 1704, as illustrated by process step 2044. If caller 182 enters a keystroke to order a title, as illustrated in step 2028E, VRU 104 determines the title associated with the song playing while the key is depressed, as illustrated by step 2052. At this point, VRU 104 adds the selected title to the caller's order, as illustrated by step 2056.

Detailed Description Text (257):
If all the songs have been played, as determined by decision step 2062, VRU 104 plays a script indicating that all the songs have been played, and returns the process to the main menu at step 1704. This is illustrated by steps 2064 and 2066.

Detailed Description Text (258):
Although this description was provided in terms of playing the top five songs for a radio station, a similar process can be followed for a different number of songs and for a list of songs not necessarily associated with a particular radio station. Where the songs are not associated with a particular radio station, step 2008, where the radio station is introduced, may be deleted or changed to introduce the top-five selection in a different manner. Similarly, other changes to and additions and deletions of the process steps can be made to tailor the top-hits sampler to suit a particular application.

Detailed Description Text (259):
Where caller 182 selects to sample selections from among the top 20 selections, as illustrated by input step 1708C, a similar process is followed to that depicted in FIGS. 20, 20B, and 20C. Because, in the depicted embodiment, the top-20 song list is format-specific, as opposed to radio-station-specific, there is no need to determine whether this is the caller's first time in this menu selection and to play a radio station introduction for this selection. Instead, the operation can

proceed directly to step 2012, where an introduction script may be played announcing that caller 182 has selected the top 20 selections browse feature. Again, in step 2014, the artist, album, and song are announced as each song is played. There is no need to provide availability, price and delivery information at this time.

Detailed Description Text (260):
Caller 182 may again enter scanning key selections as illustrated by input steps 2028A through 2028E. Once caller 182 decides to order a product, and VRU 104 determines the title associated with the song playing when caller 182 orders the product (step 2052). At this point, VRU 104 obtains availability, price and delivery information from interactive transaction database 112.

Detailed Description Text (261):
These top-hits examples are provided in terms of a scenario where a top-five hit list for a particular station and a top-twenty nationwide hits list is sampled. Other lists such as radio station play lists (for example, a list of songs played on the associated radio station during the past half hour) other top-hits lists, promotional items lists, etc. can be sampled as well.

Detailed Description Text (262):
4.3 Music Mall

Detailed Description Text (263):
If at the main menu, caller 182 elects to go to the "Music Mall", he or she is allowed to browse among music samples from any title available in automated product purchasing system. This browsing can be performed based on artist, catalog ID number, promotional specials, and other categories. Browse by artist and browse by catalog ID number are described in detail in this section of the document.

Detailed Description Text (264):
In keeping with the music embodiment described above, this description of the Music Mall is provided in terms of a system for automated shopping for music titles. It is important to note that, as with other portions of the automated product purchasing system, the Music Mall embodiments are not limited to use with music titles but can be implemented to offer any of a number of virtually unlimited product types.

Detailed Description Text (266):
According to one embodiment, selecting, sampling and purchasing in the Music Mall is done according to the artist. FIG. 21 is high level block diagram illustrating a general process of browsing though the Music Mall according to this embodiment. Referring now to FIG. 21, in a step 2104, the caller 182 identifies an artist whose titles he or she would like to sample. In a step 2108, VRU 104 plays a script to caller 182 identifying the titles available for that artist. Caller 182 selects a title which he or she would like to browse (in one embodiment, caller 182 can elect to hear a "browser" of that album.

Detailed Description Text (267):
In a step 2112, selections on the title can be browsed by caller 182 utilizing the browse features of VRU 104. After browsing a title, in a step 2116 caller 182 decides whether to purchase the title browsed. At any point in time while in the Music Mall, caller 182 may decide to identify a different artist to browse or select a different title of the artist to browse. This is illustrated by flow lines 2162 and 2164. When caller 182 is finished browsing and/or purchasing titles, caller 182 exits the Music Mall as indicated by a step 2120. Having thus described a high-level process of the Music Mall according to one embodiment, the Music Mall is now described in greater detail in accordance with this embodiment.

Detailed Description Text (268):

FIGS. 22 and 23 are detailed process flow diagrams illustrating the manner by which an artist is identified according to one embodiment of the invention. Referring now to FIG. 22, in a step 2204, VRU 104 enters the Music Mall allowing caller 182 to search the titles by artist name. In a step 2208, VRU 104 plays a script to caller 182 asking the caller to identify an artist using the telephone key pad. Specifically, in one embodiment, the caller uses the telephone key pad to enter in the artist's name. This is done by using the alphanumeric designations on the keypad to spell the artist's name.

Detailed Description Text (271):
If an artist is identified by the keypad entry, VRU 104 determines whether one artist matches the keypad entry or several artists match the keypad entry. This is illustrated by decision step 2236. If only one artist is identified matching the keypad entry, the identification of the artist portion of the Music Mall is completed and the operation continues at a step 2404 in FIG. 24, as described below.

Detailed Description Text (286):
The following albums are available in the Music Mall. For [first album name] press one. For [second album name] press two.

Detailed Description Text (287):
And so on for each album found in the Music Mall by that artist. Once the available titles are read to caller 182, VRU 104 prompts the caller to select a title, try another artist or advance to the help feature, as illustrated in step 2414. Caller 182 responds by either selecting a title, or entering a key to bring him or her to try another artist or to go to the help mode. This is illustrated by steps 2416, 2418 and 2420, respectively. Note that the operation of prompting caller 182 to select the title based on a list of titles is quite similar to the steps illustrated in FIG. 23 where caller 182 was asked to select one artist from the grouping of artists. The only difference in this instance is that the scripting prompts caller 182 to select the appropriate title from the list of titles as opposed to the appropriate artist from the list of artists. If one of the grouping of titles is selected, the operation continues as illustrated in FIG. 25.

Detailed Description Text (292):
Where a caller elects to purchase the title as illustrated by input step 2514, VRU 104 enters the selection in an order for the caller 182. This is illustrated by a step 2524. If caller 182 chooses to exit, he or she is returned to the main menu, as shown in step 2526. In one embodiment, the selection of a title for purchase by caller 182 results in that title being placed in that caller's virtual shopping cart. One embodiment of the process by which a title is placed in the caller's virtual shopping cart is further described below with reference to FIGS. 29 and 30.

Detailed Description Text (294):
In the embodiment of the Music Mall described above with reference to FIGS. 21 through 25, caller 182 selected titles from among the selections available from automated product purchasing system in a search by an artist's name. In one alternative embodiment, caller 182 can select available titles by entering a catalog number. This embodiment is useful where caller 182 has access to a product catalog listing catalog numbers for the titles offered. For example, where caller 182 is a member he or she may receive a catalog of titles as a part of a "membership package." The process of browsing the available titles based on catalog number is now described.

Detailed Description Text (298):
Additionally, caller 182 may choose to exit this portion of the Music Mall as illustrated by input step 2630. This would cause caller 182 to be returned to the beginning of the Music Mall shopping process as illustrated by a step 2634.

Detailed Description Text (299):
If caller 182 decides to browse the title (input step 2628), in a step 2632 VRU 104 provides cuts from the tracks on the selected title allowing caller 182 to listen to samples of the music on that title (i.e., to browse that title). The process by which VRU 104 allows caller 182 to browse the title according to one embodiment is illustrated in FIG. 28.

Detailed Description Text (311):
In a step 2808, VRU 104 plays selected cuts from songs on the title selected by caller 182. In one embodiment, this is accomplished by playing cuts stored in a datafile in VRU 104. An announcement can be interleaved with these cuts announcing each cut and indicating, for example, the title of the song from which the cut is made.

Detailed Description Text (314):
In one embodiment, these input keys for ordering or returning to the calling selection can be announced to caller 182 when caller 182 first accesses the automated product purchasing system, when caller 182 is introduced to the selections that he or she is going to be browsing, or at other appropriate times.

Detailed Description Text (315):
If caller 182 decides to order the title by entering the order key as illustrated by step 2816, VRU 104 adds the ordered title to the caller's order information in interactive transaction database 112, as illustrated in step 2824. In one embodiment, this has the effect of placing the title into the caller's virtual shopping cart. In one embodiment, the process by which titles are entered into the virtual shopping cart is performed as illustrated by the process described in FIGS. 29 and 30.

Detailed Description Text (319):
As described above, caller 182 is provided with numerous opportunities to purchase a title that he or she has selected and/or sampled. As briefly mentioned above, in one embodiment, this results in a catalog ID for the selected title being provided to interactive transaction database 112 as part of the order information for that caller's order. This is referred to as placing the title in the caller's virtual shopping cart. Also, as stated above, items placed in the shopping cart can later be removed before the purchase is completed or they can be left in the shopping cart until such time as caller 182 decides that he or she has finished shopping and wishes to complete the purchase of the selected items (i.e., until the caller checks out).

Detailed Description Text (324):
If the selected title on the selected medium is available in stock, as illustrated by decision step 2918, the item is placed into the shopper's virtual shopping cart as illustrated by a step 2922. As described above, according to one embodiment, this is accomplished by appending the catalog ID of the selected title to order information for the caller 182 stored in interactive transaction database 112. A script may be played announcing that the item has been placed in the caller's virtual shopping cart.

Detailed Description Text (325):
If the item is not available in stock for immediate delivery, VRU 104 checks the membership profile stored in interactive transaction database 112 to determine whether the caller 182 prefers rush shipping. This is illustrated by decision step 2926. If the caller 182 does not prefer rush shipping, the item is placed into the caller's virtual shopping cart as illustrated by step 2922. If, on the other hand, caller 182 prefers rush shipping VRU 104 plays a script announcing to caller 182 that the item is not available for rush shipment and to please enter a keystroke indicating whether he or she wishes to still order the item, as shown in step 2930.

Detailed Description Text (326):
If the caller 182 still wishes to order the selected title, the title is placed into the caller's virtual shopping cart in step 2922. If, on the other hand, caller 182 decides not to keep the item, VRU 104 deletes or discards the item selection and plays a script informing caller 182 that his or her selection has been canceled. This occurs in a step 2934.

Detailed Description Text (329):
In a step 3012, VRU 104 determines whether caller 182 is done shopping. This can be accomplished by playing a script to caller 182, asking whether he or she would like to continue shopping or whether he or she would like to go to the register and check out, and waiting for an input key in response. If caller 182 would like to continue shopping, he or she is returned to the shopping mode, as illustrated in step 3020, where selections can be browsed as described in this document. If, on the other hand, he or she would like to check out, VRU 104 begins review and order processing, as shown in step 3016. Review and order processing according to one embodiment is described further with reference to FIG. 32.

Detailed Description Text (331):
To provide the highest level of customer support available, a help mode can be provided in VRU 104 allowing caller 182 to obtain additional instructions throughout the shopping and ordering process. Although numerous features can be provided by a help service, one embodiment allows caller 182 to obtain a system overview, listen to questions and answers about the automated product purchasing system, or allowing the caller to request to be forwarded to a customer service representative. This embodiment is illustrated in the operational flow diagram of FIG. 31.

Detailed Description Text (336):
5.4 Review and Order Processing

Detailed Description Text (341):
Where caller 182 is not a member, he or she is transferred to customer service center 108 to complete the order with a customer service representative and to optionally become a member.

Detailed Description Text (342):
In one embodiment, before a caller 182 is transferred to customer service center 108, that caller's order is reviewed and caller 182 is provided with his or her order number. The process by which this review of the order is accomplished is described in further detail below with reference to FIG. 33.

Detailed Description Text (344):
In a step 3208, the order is reviewed with caller 182 to verify that the items in the caller's shopping cart are the items that he or she actually wishes to purchase. In an alternative embodiment, this process of reviewing the order and providing the caller with an order number is not performed where caller 182 is a member, but is only performed where the order must be completed by a sales and service representative in customer service center 108.

Detailed Description Text (345):
In a step 3212, interactive transaction database 112 determines price and delivery information for the items in the caller's shopping cart. In one embodiment, interactive transaction database 112 calculates shipping and handling costs and also calculates a tax for the items purchased and returns this information to VRU 104. VRU 104 announces the total purchase price, the shipping price, the amount of tax on the order, and the grand total to caller 182. Finally, in a step 3216, the order is processed and the call is completed.

Detailed Description Text (346):
5.5 Order Review

Detailed Description Text (347):
As described above, in a step 3208, the order is reviewed with caller 182 before order processing is finalized. This step can be accomplished for all orders placed by a caller 182, or only for orders placed where caller 182 must first be transferred to customer service center 108 to complete the transaction. FIG. 33 is an operational flow diagram illustrating a process by which the order is reviewed, according to one embodiment of the invention. FIG. 33 specifically illustrates the review process for a situation where caller 182 is a non-member and needs to be transferred to a customer service representative after the review is completed.

Detailed Description Text (348):
Referring now to FIG. 33, in a step 3308, VRU 104 plays a script listing the items in caller's virtual shopping cart. This script informs the caller of the items that he or she selected and, optionally, the medium for each of those titles. In a step 3312, VRU 104 queries interactive transaction database 112 for an order number associated with the caller's order. In this step, VRU 104 may announce to the caller that he or she needs to prepare to take the order number and write it down in case there is a question about the order when the caller 182 is transferred to the customer service center 108.

Detailed Description Text (349):
In a step 3316, VRU 104 plays a script to caller 182 announcing the order number of the caller's order. If for some reason caller 182 did not understand the order number, he or she is given an option to replay the order number as illustrated step 3320.

Detailed Description Text (350):
Once caller 182 has the order number, the call is transferred to the customer service center by a step 3324. Note that in embodiments where the order is reviewed even where there is no need to transfer caller 182 to customer service center 108, step 3324 is skipped and the operation continues at step 3212 as illustrated in FIG. 32.

Detailed Description Text (352):
In addition to this process for order review, caller 182 may elect to review the items in his or her shopping cart so that one or more of the items may be removed from the cart prior to purchase. A process by which this is accomplished in one embodiment is described below with reference to FIG. 36.

Detailed Description Text (353):
5.6 Order Processing

Detailed Description Text (354):
During the order processing step 3216, interactive transaction database 112 verifies the caller's payment information. For example, where caller 182 is paying by credit card, interactive transaction database 112 verifies that the caller's credit is valid. In one embodiment, this is accomplished by sending a message across WAN 412 to authorization server 440. Authorization server verifies the credit information and replies with a message indicating the validity of the credit. Where the credit is not valid, caller 182 is transferred to a sales and service representative at customer service center 108. Where, on the other hand, the credit or payment information is valid, the order is processed and the transaction is completed.

Detailed Description Text (357):
In one embodiment of the automated product purchasing system, a time-out feature is

included to limit the amount of time a given caller 182 is permitted to shop the selections available by automated product purchasing system. A system timer in VRU 104 keeps track of the elapsed time that caller 182 is connected to VRU 104. Additionally, VRU 104 keeps track of the actual time that caller 182 is sampling music. This is referred to as "sample time." Thus, for example, if a caller 182 is connected to VRU 104 for a minute and a half and during this time samples five selections each with a sample length of ten seconds, that caller's elapsed time is ninety seconds and his or her sample time is fifty seconds.

Detailed Description Text (361):
If additional time has not already been granted, VRU 104 determines whether caller 182 has any items in his or her virtual shopping cart. This is illustrated by decision step 3412. In one embodiment, this is accomplished by VRU 104 querying interactive transaction database 112 to retrieve order information for that caller 182. If there are items in the caller's virtual shopping cart, the sampling time is increased as indicated by step 3416. If, on the other hand, there are no items in the caller's virtual shopping cart, VRU 104 plays a script announcing to caller 182 that his or her time-out period has expired. This occurs in a step 3420. In a step 3424 caller 182 is disconnected from VRU 104.

Detailed Description Text (364):
For non-members, the occurrence of a time-out is announced as illustrated by a step 3438. Additionally, because a nonmember must speak to a customer service representative to check out any items in his or her shopping cart, VRU 104 provides caller 182 with his or her order number. This is illustrated by a step 3442. Additionally, VRU 104 provides caller 182 with an option to repeat the order number in case he or she missed the number during the first announcement. This is illustrated by a step 3444.

Detailed Description Text (368):
As described above, in one embodiment caller 182 may be forwarded to the checkout process as a result of his or her time-out period expiring. To accommodate this situation, during the checkout processing VRU 104 may first determine whether caller 182 arrived at the checkout register as a result of a time-out. This is illustrated by a decision step 3504. If caller 182 did not arrive at the checkout line because of a time out, order processing can continue normally as described above. If, on the other hand, caller 182 is arriving at the check out process due to a time-out, a special time-out order preprocessing process can be followed.

Detailed Description Text (369):
FIG. 35 is an operational flow diagram illustrating time-out order preprocessing according to one embodiment of the invention. In a step 3508, VRU 104 prompts caller 182 to determine whether he or she would like to review the items in the virtual shopping cart before ordering. If caller 182 elects to order the items as illustrated by input step 3512, caller 182 is advanced to the checkout process to complete the transaction. This is illustrated by step 3516.

Detailed Description Text (374):
Referring now to FIG. 36, in a step 3604, VRU 104 announces the items in the caller's virtual shopping cart one at a time. After each item is announced, VRU 104 queries caller 182 as to whether he or she wishes to accept this selection or to remove it from the order (i.e., from the virtual shopping cart). This is illustrated by a decision step 3608.

Detailed Description Text (375):
If caller 182 elects to remove the item from the shopping cart in a step 3612, VRU 104 deletes the item from the caller's order. In one embodiment, this is accomplished by sending a message to interactive transaction database 112 deleting the catalog ID number from the caller's order information.

Detailed Description Text (376):
After the item has been either deleted or retained, VRU 104 checks the order information to determine whether there are any additional items in the shopping cart that need to be reviewed. This is illustrated by a decision step 3616. If there are additional items in the virtual shopping cart, the operation returns to a step 3604 where the next item is reviewed and caller 182 can either accept or delete the item. This process continues until there are no more items left to review.

Detailed Description Text (377):
At this time, all items that are in the virtual shopping cart have been reviewed by the caller and accepted or deleted. In a step 3620, VRU 104 determines whether there are any items at all left in the virtual shopping cart. If there are, caller 182 is allowed to continue with the call where he or she left off. For example, if this review order process was occurring as a result of the check out process, in a step 3624, VRU 104 continues with the check out process. If, alternatively, this review process was commenced while the caller was shopping among the selections, in step 3624 VRU 104 allows the caller to continue shopping.

Detailed Description Text (382):
A process by which items on hold are handled according to one embodiment of the invention is illustrated in FIG. 37. In one embodiment, items on hold are only maintained for callers 182 who have membership IDs. In alternative embodiments, orders can be held based on the caller's ANI or on some other attribute. In embodiments where the commutations medium is other than a telephone, the hold is made based on membership ID. For Internet access, the hold may be based on the Internet IP address of the caller's terminal. One disadvantage of using the ANI or IP address is that a different caller 182 may access the system from the same phone or Internet terminal causing the system to think that the items are on hold by this different caller 182.

Detailed Description Text (383):
Referring now to FIG. 37, in a step 3704, upon receiving a call from caller 182, VRU 104 determines whether caller 182 has any items on hold from a previous call. This status can be determined by VRU 104 retrieving any existing order information for that caller 182. Where there are no items on hold, VRU 104 immediately progresses to the shopping mode, allowing caller 182 to shop, listen to and purchase selections. This is illustrated by a step 3708.

Detailed Description Text (385):
You currently have an order on hold. To review your order, press 1. To accept your order, press 2. To cancel this order, press 3.

Detailed Description Text (386):
If caller 182 decides to accept all of the items on hold as illustrated by input step 3716, VRU 104 returns all of these held items to the caller's virtual shopping cart. In one embodiment, this is accomplished by maintaining existing order information for caller 182. In an alternative embodiment, this may be accomplished by having interactive transaction database 112 open a new order, and placing these existing items into that new order. The process of returning the items to the caller's shopping cart is illustrated by a step 3720. To confirm the action, VRU 104 can play a script thanking the caller and informing him or her that the items have been placed into his or her virtual shopping cart. At this time, VRU 104 invokes the shopping mode where caller 182 can browse through additional selections or simply purchase the selections that were on hold.

Detailed Description Text (387):
If, in response to the scripted menu provided in step 3712, caller 182 decides to delete all of the items in his or her virtual shopping cart, as indicated by input step 3724, VRU 104 simply deletes these items from the order. This deletion step is

illustrated by a step 3728. In one embodiment this is accomplished by deleting all the order information from the previous call and beginning anew with fresh order information for the present call. In an alternative embodiment, the deletion is accomplished by simply removing the items' catalog ID numbers 1008 from the order information in interactive transaction database 112. A confirmation script can be played by VRU 104 announcing that the order has been canceled. As with the other options, at this time the caller is returned to the shopping mode where he or she can sample additional selections or terminate the phone call.

Detailed Description Text (388):
Although not illustrated, in one embodiment, caller 182 is given the option of hearing a listing of the items in his or her virtual shopping cart before deciding whether to keep or cancel the order entirely.

Detailed Description Text (389):
Finally, caller 182 may decide to individually review the items in the virtual shopping cart and determine whether each individual item is to be kept. If this is the case, caller 182 elects to review the items on hold as illustrated by input step 3732. In response, in a step 3736, VRU 104 reviews the order with caller 182. In one embodiment, this is accomplished by a process similar to that illustrated in FIG. 36 where each item is reviewed one at a time, and caller 182 selects whether to accept or delete each item. Once the review order process is complete, caller 182 is forwarded to the shopping mode where he or she can sample additional selections, immediately purchase the selections remaining in his or her virtual shopping cart, or terminate the call.

Detailed Description Text (392):
In another embodiment, the medium by which the user interacts with the automated product purchasing system could be a network connection such as a the Internet network. In this embodiment, the user would access the automated product purchasing system via a network connection and browse the selections available within the automated product purchasing system. If the user finds a title about which he or she would like additional information, audio and video clips, as well as text information can be downloaded to the user's terminal to review the selection. Thus, the browsing and shopping feature of the automated product purchasing system could be provided with full multi-media browsing and shopping capabilities.

Detailed Description Text (400):
Also, special or promotional items may be maintained by the automated product purchasing system as being associated with a particular product. For example, a recording artist may wish to offer a promotional T-shirt with the purchase of a particular album. In this case, this information is stored along with the album information. For example, in one embodiment, the information offering the free T-shirt may be stored with the product information at the interactive transaction database 112. When interface unit 104 requests product information (e.g., price and availability), this information is forwarded to interface unit 104 as well. Interface unit 104 plays a script to customer 182 informing him or her that a free T-shirt accompanies the purchase of the title. If customer 182 purchases the title, a catalog ID number for the T-shirt is appended to the customer's order information.

Detailed Description Text (403):
Announcements are made to customer 182 announcing these specials. For example, for the telephone customer (caller 182), VRU 104 plays scripts announcing the specials. As another example, Internet customers have special announcements on the home page, or can access a "specials" page.

Detailed Description Text (404):
In one embodiment, promotions are capped for each order. For example, customer 182 can receive multiple promotions for a total amount up to a determined cap.

Detailed Description Text (405):
In one embodiment, electronic couponing is implemented as a form of promotion, allowing customers to take advantage of special sales of certain items. The coupons can be offered to customers in general or only to certain preferred customers. This can be accomplished by sending customers coupons by mail or via periodicals, where the coupons have a coupon number. When placing an order, customer 182 enters the coupon number with his or her order to receive the special sale. Coupons can also be advertised via television and radio as well as over the Internet.

Detailed Description Text (409):
As stated above, promotions can be offered to new customers. Promotions can also be established for customers who have established a membership profile but have not purchased, customers who have not ordered for a given period of time, customers located in a specific geographic area, customers accessing the service during a given time period, frequent customers, certain groups (e.g., group membership rates), customer classifications (such as telephone user, Internet user, etc.).

Detailed Description Text (410):
For customers who have not ordered in a specified period of time, interactive transaction database 112 references the last purchase data for the customer's membership number and calculates the elapsed time. For frequent customers 182, customer statistics are used to determine eligibility.

Detailed Description Text (411):
Geographic area-based promotions are determined by the caller's ANI or a portion thereof For Internet subscribers, this can be done using membership information.

Detailed Description Text (412):
Where promotions apply, the information is provided to fulfillment vendor 436 (or other supplier) so that the order can include the promotional item. This may include promotional or credit information so that the packing slip and receipt reflect the proper amount.

Detailed Description Text (414):
The automated product purchasing system described above is described in terms of an environment where an individual user accesses the automated product purchasing system to shop available selections and possibly to order products in an automated fashion. This embodiment primarily contemplates that the various callers (or users accessing via other communications media) are individuals shopping for their own immediate purchases via the automated product purchasing system. It goes without saying; however, that use of the automated product purchasing system in the embodiments described above is not limited to access by individual users for immediate purchasing, but the automated product purchasing system could be used with businesses such as retail outlets to preview products prior to purchase by that retailer.

Detailed Description Text (415):
For example, a retail store such as a record store may provide access to the automated product purchasing system so that the customers of the record store could access the automated product purchasing system to sample the music selections available through the automated product purchasing system before that customer purchases a selection from the record store. Thus, record stores could provide access to the automated product purchasing system to allow record store customers to preview titles before the customer actually purchases the title.

Detailed Description Text (416):
Additionally, in this manner, customers of the record store could also comparison shop by comparing prices of the titles in the record store against prices available through ordering in the automated product purchasing system. Additionally, an

alternative embodiment of the automated product purchasing system is used in conjunction with the retail outlet to facilitate purchasing at the retail outlet.

Detailed Description Text (421):
Depending on the arrangement between retail store 3804 and the operator of the automated product purchasing system 3802, the communications medium could utilize a direct line to the automated product purchasing system 3802 via, for example, microwave, satellite or cable connections, or a network such as a LAN or WAN, or a publicly accessible network such as the Internet. The customer could communicate via phone, a listening booth, a computer terminal or station, or some other interactive means.

Detailed Description Text (422):
This embodiment is particularly valuable in an environment where the product offered for sale is music, videos, software, video games or other multimedia products. In this environment, a shopper 3808 can sample selections available at the automated product purchasing system to determine whether he or she actually wishes to purchase a title before purchasing that title at retail store 3804. Thus, retail store 3804 does not have to have samples available for each of the potentially thousands of titles stocked by retail store 3804. Instead, the samples are provided to the shopper 3808 via the automated product purchasing system. Thus, even the smallest retail store could compete effectively with even the largest chain retail outlet.

Detailed Description Text (427):
As described above, the automated product purchasing system in general can be used for numerous products, including multimedia, regardless of the environment of the shopper 3808. Note that in order to fully sample more complex products such as video products and computer software products, the shopper would need to have more than a telephone hookup to do so. However even over a telephone, a shopper can at least hear product descriptions to order alternative products via the telephone as described above.

Detailed Description Text (428):
FIG. 39 is a block diagram illustrating a slightly more complex embodiment where the automated product purchasing system is used in conjunction with a retail store 3804. Referring now to FIG. 39, in this embodiment retail store 3804 further includes an in-store system 3908. In an embodiment where retail store 3804 is a music store, in-store system 3908 could be, for example, an in-house music sampling system. For example, many music stores today have juke box or other systems where shoppers can pick up a pair of headphones and listen to selected titles available in the store. Typically, the amount of music that can be sampled by these systems is limited as it is not practical for music stores to provide numerous titles in a jukebox fashion.

Detailed Description Text (444):
Referring now to FIG. 41, in this embodiment, an automated product purchasing system (illustrated as 4100 in FIG. 41) in a retail store environment includes a user interface 4104 and an interactive transaction database 4112. Automated product purchasing system 4100 interfaces to an order processing center 4116. In this architecture, user interface 4104 is analogous to user interface 104 as described above, and interactive transaction database 4112 is analogous to interactive transaction database 112 as described above.

Detailed Description Text (445):
User interface 4104 provides an interface by which a customer of retail store 3804 can browse available selections in retail store 3804 and place orders. Interactive transaction database 4112 contains the necessary data required to facilitate the browsing and purchasing of products by the customer.

Detailed Description Text (447):
Similarly, in this embodiment, interactive transaction database 4112 provides similar functionality and includes similar data types as those provided by interactive transaction database 112 described above and listed in FIG. 12. Note, however, that it may not be desirable to maintain shipping and delivery information as this is a retail store environment where shipping may not be a concern. However, customers visiting retail store 3804 from out of town or in other circumstances may wish to have a product shipped to a particular area, in which case such shipping information would be beneficial. Further note that tax information may be maintained to enable tax computation for the purchases. Tax information for other jurisdictions can also be maintained where it is anticipated that orders may be shipped to those jurisdictions by retail store 3804.

Detailed Description Text (451):
Where the product is strictly music, an audio interface to the customer is useful to allow the customer to hear the music samples. For products that are strictly music, interfaces more complex than audio interfaces are not required.

Detailed Description Text (453):
Once a customer has ordered one or more selections via user interface 4104, user interface 4104 compiles order information in interactive transaction database 4112, and sends the order to an order processing system 4116. Order processing system 4116 gathers the selected items so that they can be provided to the customer. Order processing system 4116 can be an in-house order processing facility, a mail order facility such as, for example, fulfillment center 436, a warehouse, a centralized redemption center or other like facility.

Detailed Description Text (454):
In one embodiment, for example, a customer 3808 at a remote location can access an automated product purchasing system associated with a retail store 3804. The customer 3808 could sample selections and make purchases via the automated product purchasing system. The automated product purchasing system notifies the retail store 3804 of the customer's order. Then the customer 3808 can go to retail store 3804 to pick-up the items. Payment can be made via the automated product purchasing system or at retail store 3804.

Detailed Description Text (455):
FIG. 42 is an operational flow diagram illustrating an example process by which the architecture illustrated in FIG. 41 facilitates automated retail shopping. In a step 4204, user interface 4104 allows the customer to browse the selections available in retail store 3804. This browsing can be accomplished in a number of different ways, including, for example, the browsing and sampling of music selections as described in great detail above with various embodiments of the remote automated product purchasing system.

Detailed Description Text (456):
Where the product is music, the customer is allowed to listen and sample music selections before ordering an item. Where the product is videos, video games, computer software, or multimedia products, the customer is allowed to sample these products before placing an order. For movies or other video products, the customer may be played a brief sample clip of the title. For video games, the user may be allowed to play a demo version of the game. And so on.

Detailed Description Text (457):
While the customer is browsing, if he or she comes upon an item that he or she would like to purchase, the customer enters his or her choice at the user interface 4104. In response, in a step 4208, user interface 4104 places the ordered items in the customer's order. In one embodiment, user interface 4104 places the item in the customer's virtual shopping cart. In one embodiment, this is accomplished by appending a catalog identification number for the selected item into an order file

for the customer.

Detailed Description Text (459):
Where the customer is a member of the service, that customer's profile information can be maintained on file and payment of the order can be made automatically if the customer so desires. Alternatively, the customer can chose to enter credit card or ATM information via user interface 4104. In this embodiment, this information can be entered using input keys or a touch screen display at user interface 4104. Additionally, a card reader or other device reader can be provided at user interface 4104 to read the customer's payment information.

Detailed Description Text (460):
To ensure user security, membership ID numbers and PIN numbers can also be maintained in this retail store embodiment. In summary, all the features and advantages described above with reference to the automated product purchasing system described in terms of the music ordering service can be incorporated into the retail store embodiment, including variations on the user interface. Note that for an in-store embodiment, a telephone interface is generally not required. However, the interface can be provided by voice recognition, a computer keypad, a touch screen display screen, or other interface means.

Detailed Description Text (461):
In a step 4216, once the transaction is completed, the order information is forwarded to order processing center 4116 to process the order. Order processing center 4116 takes the order information and fills the customer's order. Order processing center can be implemented using workers who read the order information and retrieve the items from the store shelves to be provided to the customer who purchased those items. In one embodiment, when the customer completes the transaction, a sales slip is printed by user interface 4104. This sales slip includes an order number that can be used to reference the order. The customer provides this sales slip to order processing center 4116 to pick up the order when it is ready. This ensures that the completed order is not given to someone other than the customer who placed that order.

Detailed Description Text (462):
In an alternative embodiment, the membership number is provided along with the order to the order processing center. In this embodiment, the member simply needs to present his or her membership ID card to the order processing center 4116 to pick up his or her order. Again, PINs can be used to prevent the use of stolen membership cards or IDs.

Detailed Description Text (463):
7.3 Automated Order Processing Center

Detailed Description Text (464):
In yet another embodiment, order processing center 4116 is also automated. FIG. 43 is a high level block diagram illustrating an automated order processing center 4116. Order processing center in this automated embodiment includes an automated order picker 4304 and an automated in-store vendor 4308. Automated order picker 4304 is an automated system for retrieving items in an automated warehouse or storehouse. Automated in-store vendor 4308 is an automated device for providing the retrieved order to the customer. The manner in which the automated order processing center 4116 operates, according to one embodiment of the invention, is described in FIG. 44.

Detailed Description Text (465):
Referring now to FIG. 44, in a step 4408 automated order picker 4304 receives the order information. Order information includes at a minimum a listing of the items ordered by the customer. Automated order information can further include location information indicating to automated order picker 4304 where those items can be

found in the warehouse (for example, shelf or bin number). Where interactive transaction database 4112 provides the location information to automated order picker 4304, the information can be maintained by interactive transaction database 4112.

Detailed Description Text (466):
Alternatively, in another embodiment, this location information can be maintained by the automated order picker 4304 in its own database. In this embodiment, when an order is received, order picker 4304 looks up a location for each item in the order.

Detailed Description Text (467):
In a step 4412, automatic order picker 4304 retrieves their ordered items from their designated locations. As items are removed from the warehouse shelves, or after the order is filled, automatic order picker updates the inventory to reflect the fact that the item has been sold. This occurs in a step 4416. Inventory updates can be provided back to interactive transaction database 4112, such that interactive transaction database 4112 can provide availability information to the customer. Alternatively, the inventory can be maintained fully at the automatic order picker 4304 and this information queried as a user is browsing the products or when the user places an order for a product. Automatic order picker 4304 can interface with interactive transaction database 4112 via a direct connection, via a local area network or via other communications means.

Detailed Description Text (468):
In a step 4420 automatic order picker 4304 provides the completed order to automated in-store vendor where these items are provided to the customer. Automated in-store vendor is an automated vending machine which receives the ordered items and from automatic order picker 4304 and provides them to the customer. In one embodiment, automated in-store vendor 4308 is a vending machine having a secured access bay. Items are placed into this bay by automatic order picker 4304 as the order is being completed. Once the order is completed, the customer can open an access door and retrieve the selected items.

Detailed Description Text (469):
For security reasons, in one embodiment the customer is required to enter his membership ID and PIN into automated in-store vendor 4308 in order to access the secured bay. Alternative means are available for ensuring the security of the vended items, such as providing the user with an access code at the time the sale is completed. In yet another embodiment, the vending machine can be collocated with user interface 3804 so that the items are provided directly to the customer upon completion of the order. An advantage of separate vending machines, however, is that the customer does not have to "tie up" user interface 3804 while waiting for the order to be filled.

Detailed Description Text (470):
In an alternative embodiment, order processing center 4116 can be semi-automated by having automated order pickers 4304 retrieve the ordered items while using a live representative to act as the in-store vendor.

Detailed Description Text (471):
In the embodiments described above, payment information is provided to user interface 4104 before the purchase is completed. In alternative embodiments, payments can be made to an order processing representative in a check-out line when the customer receives the items ordered. Additionally, in the fully automated embodiment, payment can be made at automated in-store vendor 4308 using a credit/debit/ATM card scanner or by allowing a customer to enter account information and or membership information at the automated in-store vendor.

Current US Original Classification (1):

705/26

Current US Cross Reference Classification (1):
705/27

Other Reference Publication (1):
"VH1 Online Takes Vid Net to Cyberspace", Billboard, v 107, n 41, pp. 41+ Oct. 14, 1995.

Other Reference Publication (2):
"Virgin Goes On Line With Net Shopping", Music Week, p. 4, Apr. 29, 1995.

Other Reference Publication (4):
Bruce Page, Ernest Perez, "Online Help for Finding the Right Software", Link-Up, v 5, n 5, pp. 14-15, Oct. 1988.

Other Reference Publication (5):
Steven J. Bell, "Bailouts and Brutal Disconnects: How to Handle Search Interruptions", Online, v 16, n 6, pp. 50-61, Nov. 1992.

Other Reference Publication (9):
Author unknown, "Voice-Response System Improves Order Entry, Inventory Control," Communication News, Aug. 1976.

CLAIMS:

2. The automated product purchasing system of claim 1, further comprising:

means for accepting an order from the customer via the remote communications medium, said order indicating one or more of the plurality of media products that the customer would like to purchase; and

means for processing said order to complete a sale of said indicated one or more of the plurality of media products.

8. The automated product purchasing system of claim 1, wherein said media product comprise album titles and said sample is a sample of a song from one of said album titles.

13. The automated product purchasing system of claim 1, further comprising:

means for accepting an order from the customer via the remote communications medium, said order indicating a media product that the customer would like to purchase;

means for creating an order record for that customer, said order record containing an identification of said indicated media product;

means for appending the order record to include an identification of one or more additional media products ordered by the customer.

14. The automated product purchasing system of claim 13, further comprising:

means for determining whether the customer has finished ordering media products; and

means for completing a sale of the products identified in said order records.

15. The automated product purchasing system of claim 14, wherein said means for completing a sale comprises means for securing payment from the customer and means

for forwarding the customer's order to a fulfillment center for processing.

19. The automated product purchasing system of claim 18, wherein said means for providing a sample comprises means for downloading a portion of a desired one of said media products so that said portion can be run on said computer.

22. The automated product purchasing system of claim 1, wherein the user profile includes at least one of an indication of customer purchase history and customer music preference.

23. The automated product purchasing system of claim 22, wherein the customer is offered media products in response to at least one of the customer purchase history and customer music preference.

25. The method of claim 24, further comprising the steps of:

accepting an order from the customer via the remote communications medium, said order indicating one or more of the plurality of media products that the customer would like to purchase; and

processing said order to complete a sale of said indicated one or more of the plurality of media products.

29. The method of claim 24, wherein said media products comprise album titles, said sample is a sample of a song from one of said album titles and said step of providing a sample of said desired one or more media products to the customer via the remote communications medium comprises the step of transmitting said sample over the remote communications medium.

33. The method of claim 24, further comprising the steps of:

accepting an order from the customer via the remote communications medium, said order indicating a media product that the customer would like to purchase;

creating an order record for that customer, said order record containing an identification of said indicated media product;

appending the order record to include an identification of one or more additional media products ordered by the customer.

34. The method of claim 33, further comprising the steps of:

determining whether the customer has finished ordering media products; and

completing a sale of the products identified in said order records.

35. The method of claim 34, wherein said step of completing a sale comprises the steps of:

securing payment from the customer; and

forwarding the customer's order to a fulfillment center for processing.

37. The method of claim 24, wherein said step of providing a sample comprises the step of downloading a sample of a desired one of said media products to the customer via the remote communications medium so that said sample can be run on a computer at a remote location.

39. The method of claim 24, further including the step of obtaining and maintaining a user profile, the user profile including an indication of at least one of a

customer purchase history and a customer music preference.

40. The method of claim 39, further including the step of offering media products to the customer in response to at least one of the customer purchase history and customer music preference.

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# Refine Search

**Search Results -**

| Terms | Documents |
|---|---|
| (online or www or web or Internet) and music$ and song and down$ and order$ | 3 |

**Database:**
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

**Search:** L10

Refine Search | Recall Text | Clear | Interrupt

**Search History**

**DATE: Saturday, September 18, 2004** Printable Copy Create Case

| Set Name side by side | Query | Hit Count | Set Name result set |
|---|---|---|---|
| *DB=EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR* | | | |
| L10 | (online or www or web or Internet) and music$ and song and down$ and order$ | 3 | L10 |
| L9 | L3 | 0 | L9 |
| L8 | L3 | 0 | L8 |
| *DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR* | | | |
| L7 | L5 and ((ser$ or buy$ or purchas$) with profil$) | 5 | L7 |
| L6 | L5 and l1 | 0 | L6 |
| L5 | L4 and @ad<=20001212 | 30 | L5 |
| L4 | L3 and l2 | 32 | L4 |
| L3 | (online or www or web or Internet) and music$ and song and down$ and order$ | 665 | L3 |
| L2 | 705/26,27.ccls. | 1181 | L2 |
| L1 | 6018724.pn. | 1 | L1 |

# Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

**Search Results** - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: NNRD444159

**Using default format because multiple data bases are involved.**

L10: Entry 1 of 3 File: TDBD Apr 1, 2001

TDB-ACC-NO: NNRD444159

DISCLOSURE TITLE: Micropayment Scheme

PUBLICATION-DATA:
IBM technical Disclosure Bulletin, April 2001, UK

ISSUE NUMBER: 444
PAGE NUMBER: 652



Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw D

☐ 2. Document ID: US 20040154459 A1, EP 1443769 A2, JP 2004233461 A

L10: Entry 2 of 3 File: DWPI Aug 12, 2004

DERWENT-ACC-NO: 2004-582966
DERWENT-WEEK: 200457


TITLE: Song data reproduction apparatus has reproduction control section controlling music reproduction based on performance data limiting information that is read when user right of order information indicates preview

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw D

☐ 3. Document ID: RD 440032 A

L10: Entry 3 of 3 File: DWPI Dec 10, 2000

DERWENT-ACC-NO: 2002-137814

DERWENT-WEEK: 200218


TITLE: Mp3 box for audio sets in vehicle



Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

| Terms | Documents |
|---|---|
| (online or www or web or Internet) and music$ and song and down$ and order$ | 3 |

**Display Format:** - Change Format

Previous Page Next Page Go to Doc#

L10: Entry 1 of 3 File: TDBD Apr 1, 2001

TDB-ACC-NO: NNRD444159

DISCLOSURE TITLE: Micropayment Scheme

PUBLICATION-DATA:
IBM technical Disclosure Bulletin, April 2001, UK

ISSUE NUMBER: 444
PAGE NUMBER: 652

PUBLICATION-DATE: April 1, 2001 (20010401)

CROSS REFERENCE: 0374-4353-0-444-652

DISCLOSURE TEXT:

This document describes a system for micropayments, using trusted devices, based on an existing, widely used, very successful system to address the same problem in a different context. In the music industry today, many albums are marketed around the world. Artists are paid not only for each album sold, but also receive a small amount of money for each time it is played on the radio. The SOCAN facts handbook (available online from http://www.socan.ca/en/socan_general/home-handbook.html) describes the system by which they receive this money, through licenses to the radio stations and a network of regional cooperating organizations. Under this system, a radio station (or independant DJ) pays a fixed amount for its license. The price of this license is based on the expected number of songs, hence the expected number of micropayments required, from the type of thing being licensed (a private party would be a small amount, a year license for a radio station would be expensive). The licensee regularly reports the exact play lists, and the payment organization uses these to pay the artists. The reason that the system is successful is that there is no reason to be dishonest about the actual songs played, since the license costs the same anyway. (In fact, usually only a sampling of playlists is actually analysed, and extrapolated to generate the payout, but that is not relevant to the present discussion.) The system proposed here involves a trusted device that can be charged only by the management organization. When a payment is required, it decrements its internal money counter, and makes a note of the party that was paid. Eventually, the money will have been used up, and the device will require "recharging'' from the management organization. During the charging operation, the management organization's system will not only update the money counter in the device, but will download the list of payments made since the last charging operation. Under this system, some payments will be lost, and some will be delayed for a long time, but most will eventually make their way to the proper destination. The party receiving payment requires only a registration number, since no data connection is ever required to the management organization, and the only connection to the people making the payments is through their recharging operations.

L10: Entry 2 of 3 File: DWPI Aug 12, 2004

DERWENT-ACC-NO: 2004-582966
DERWENT-WEEK: 200457


TITLE: Song data reproduction apparatus has reproduction control section controlling music reproduction based on performance data limiting information that is read when user right of order information indicates preview

INVENTOR: HIRATSUKA, S; IKEDA, T

PATENT-ASSIGNEE: YAMAHA CORP (NIHG)

PRIORITY-DATA: 2003JP-0019306 (January 28, 2003)



PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|
| US 20040154459 A1 | August 12, 2004 | | 000 | G10H007/00 |
| EP 1443769 A2 | August 4, 2004 | E | 018 | H04N007/24 |
| JP 2004233461 A | August 19, 2004 | | 012 | G10K015/02 |

DESIGNATED-STATES: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

APPLICATION-DATA:

| PUB-NO | APPL-DATE | APPL-NO | DESCRIPTOR |
|---|---|---|---|
| US20040154459A1 | January 26, 2004 | 2004US-0765332 | |
| EP 1443769A2 | January 21, 2004 | 2004EP-0100185 | |
| JP2004233461A | January 28, 2003 | 2003JP-0019306 | |

INT-CL (IPC): G06 F 17/60; G10 H 1/00; G10 H 7/00; G10 K 15/02; H04 N 7/24

ABSTRACTED-PUB-NO: EP 1443769A
BASIC-ABSTRACT:

NOVELTY - The apparatus (UT) has storage device (4) to store a song data including a performance data and order information. A usage right identifier refers to the order information indicating either of a purchase or preview, to find a usage right of a music content. A reproduction control section controls the music reproduction based on limiting information of the performance data, which is read when the right indicates the preview.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a song data reproduction program for use in a song data reproduction apparatus having a processor and a storage for storing song data composed of performance data and order information

(b) a server apparatus connectable to a user terminal through a communication network.

USE - Used for reproducing a song data (claimed) that is downloaded from a server through a communication network e.g. Internet.

ADVANTAGE - The apparatus uses the performance data including the reproduction limiting information and order information to enable the reproduction of the music in an appropriate mode dependent on the usage right indicated by the order information, thereby eliminating double use of the preview version and purchase version.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram depicting a hardware configuration of a song data reproduction apparatus.

Song data reproduction apparatus UT

Central processing unit (CPU) 1

Random access memory (RAM) 2

Storage device 4

Input operation section 5

ABSTRACTED-PUB-NO: EP 1443769A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: P86 T01 W02
EPI-CODES: T01-N01D1A; T01-N01D3; T01-N02B1; W02-F10C; W02-F10N5;

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L10: Entry 3 of 3 File: DWPI Dec 10, 2000

DERWENT-ACC-NO: 2002-137814
DERWENT-WEEK: 200218


TITLE: Mp3 box for audio sets in vehicle

PATENT-ASSIGNEE: ANONYMOUS (ANON)

PRIORITY-DATA: 2000RD-0440032 (November 20, 2000)

Search Selected Search ALL Clear

PATENT-FAMILY:

| | PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|---|---|---|---|---|---|
| ☐ | RD 440032 A | December 10, 2000 | | 001 | G11B000/00 |

APPLICATION-DATA:

| PUB-NO | APPL-DATE | APPL-NO | DESCRIPTOR |
|---|---|---|---|
| RD 440032A | November 20, 2000 | 2000RD-0440032 | |

INT-CL (IPC): G11 B 0/00

ABSTRACTED-PUB-NO: RD 440032A
BASIC-ABSTRACT:

NOVELTY - This is a replacement of the existing big CD-box exchanger placed in the trunk of the car. In order to preserve compatibility with the existing audio sets, the same API used to control the CD box should be used to control the Mp3 box. For the user the controls over the Mp3 songs are identical to the controls over normal CD tracks. The Mp3 box can be loaded with music from normal CD's in the car, or from the Internet. Wireless downloads from Mp3 radio broadcasts during car driving is an option.

USE - Mp3 box for audio sets in vehicle.

ADVANTAGE - Such a Mp3-player has not limits to 6 or 10 CD's, and the physical size of the memory chips is smaller than the size of the CD's. The shock absorption is no longer an issue, as there are no reading laser heads.

ABSTRACTED-PUB-NO: RD 440032A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: T03 W04

L13: Entry 1 of 2 File: USPT Oct 5, 1999

US-PAT-NO: 5963916
DOCUMENT-IDENTIFIER: US 5963916 A

TITLE: Network apparatus and method for preview of music products and compilation of market data

DATE-ISSUED: October 5, 1999

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Kaplan; Joshua D. | Berkeley | CA | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|---|---|---|---|---|---|
| Intouch Group, Inc. | San Francisco | CA | | | 02 |

APPL-NO: 08/ 741915 [PALM]
DATE FILED: October 31, 1996

PARENT-CASE:
This is a continuation-in-part of U.S. patent application Ser. No. 08/668,327 filed on Jun. 26, 1996 ABANDONED which is a continuation of U.S. patent application Ser. No. 08/282,153 filed on Jul. 28, 1994 abandoned, which is a continuation of U.S. patent application Ser. No. 08/035,661 filed on Mar. 23, 1993 abandoned, which is a continuation of U.S. patent application Ser. No. 07/957,444 filed on Oct. 6, 1992, now U.S. Pat. No. 5,237,157, which is a continuation of U.S. patent application Ser. No. 07/582,253 filed on Sep. 13, 1990 abondoned.

INT-CL: [06] G06 F 17/60

US-CL-ISSUED: 705/26
US-CL-CURRENT: 705/26

FIELD-OF-SEARCH: 235/462, 705/10, 705/26, 705/27

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

| | PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|---|---|---|---|---|
| ☐ | 3648385 | March 1972 | Barlow et al. | 35/8A |
| ☐ | 3659030 | April 1972 | Scott | 35/8A |

| | | | | |
|---|---|---|---|---|
| ☐ | 3689930 | September 1972 | Strickland | 346/1 |
| ☐ | 3702302 | November 1972 | Wilson | 252/70 |
| ☐ | 3718906 | February 1973 | Lightner | 235/381 |
| ☐ | 3724100 | April 1973 | Surel | 35/35C |
| ☐ | 3775864 | December 1973 | Bisinger et al. | 35/9A |
| ☐ | 3795989 | March 1974 | Greenberg et al. | 35/9B |
| ☐ | 3886671 | June 1975 | Liu | 35/35C |
| ☐ | 3913443 | October 1975 | Jewett | 84/1.28 |
| ☐ | 3947972 | April 1976 | Freeman | 35/8A |
| ☐ | 3990710 | November 1976 | Hughes | 369/34 |
| ☐ | 3996671 | December 1976 | Foster | 35/8A |
| ☐ | 4001947 | January 1977 | Kilby | 35/9B |
| ☐ | 4027405 | June 1977 | Schloss | 35/35C |
| ☐ | 4245404 | January 1981 | Yoshinari | 434/312 |
| ☐ | 4359631 | November 1982 | Lockwood et al. | 235/381 |
| ☐ | 4380438 | April 1983 | Okamoto | 434/157 |
| ☐ | 4414467 | November 1983 | Gould et al. | 235/381 |
| ☐ | 4423304 | December 1983 | Satoh et al. | 369/32 |
| ☐ | 4464124 | August 1984 | Romero et al. | 434/321 |
| ☐ | 4484328 | November 1984 | Schlafly | 370/85 |
| ☐ | 4490810 | December 1984 | Hon | 364/900 |
| ☐ | 4495608 | January 1985 | Kimura et al. | 369/33 |
| ☐ | 4528643 | July 1985 | Freeny, Jr. | 364/900 |
| ☐ | 4552535 | November 1985 | Steffel | 434/315 |
| ☐ | 4674055 | June 1987 | Ogaki et al. | 364/410 |
| ☐ | 4723212 | February 1988 | Mindrum et al. | 364/401 |
| ☐ | 4749354 | June 1988 | Kerman | 434/321 |
| ☐ | 4766581 | August 1988 | Korn et al. | 235/381 |
| ☐ | 4780599 | October 1988 | Baus | 235/385 |
| ☐ | 4866661 | September 1989 | de Prins | 235/385 |
| ☐ | 5041921 | August 1991 | Scheffler | 360/13 |
| ☐ | 5047614 | September 1991 | Bianco | 235/385 |
| ☐ | 5237157 | August 1993 | Kaplan | 235/375 |
| ☐ | 5351146 | September 1994 | Chan et al. | 359/118 |
| ☐ | 5365381 | November 1994 | Scheffler | 360/15 |
| ☐ | 5369571 | November 1994 | Metts | 364/401 |
| ☐ | 5418654 | May 1995 | Scheffler | 360/13 |
| | 5418713 | May 1995 | Allen | 364/403 |

| | | | | |
|---|---|---|---|---|
| ☐ | 5445295 | August 1995 | Brown | 221/3 |
| ☐ | 5459306 | October 1995 | Stein et al. | 235/383 |
| ☐ | 5465213 | November 1995 | Ross | 364/468 |
| ☐ | 5497502 | March 1996 | Castille | 455/5.1 |
| ☐ | 5499019 | March 1996 | Burgan et al. | 340/825.22 |
| ☐ | 5500514 | March 1996 | Veeneman et al. | 235/381 |
| ☐ | 5502601 | March 1996 | Scheffler | 360/32 |
| ☐ | 5504675 | April 1996 | Cragun et al. | 364/401 |
| ☐ | 5513117 | April 1996 | Small | 364/479 |
| ☐ | 5523551 | June 1996 | Scott | 235/381 |
| ☐ | 5539635 | July 1996 | Larson, Jr. | 364/401R |
| ☐ | 5550735 | August 1996 | Slade et al. | 364/401 |
| ☐ | 5563947 | October 1996 | Kikinis | 380/4 |
| ☐ | 5569082 | October 1996 | Kaye | 463/17 |
| ☐ | 5576951 | November 1996 | Lockwood | 395/227 |
| ☐ | 5629867 | May 1997 | Goldman | 364/514R |
| ☐ | 5664111 | September 1997 | Nahan et al. | 705/27 |
| ☐ | 5712979 | January 1998 | Graber et al. | 395/200 |

FOREIGN PATENT DOCUMENTS

| FOREIGN-PAT-NO | PUBN-DATE | COUNTRY | US-CL |
|---|---|---|---|
| WO 95/17794 | December 1994 | WO | |
| WO 95/24687 | March 1995 | WO | |
| WO 95/29453 | April 1995 | WO | |

OTHER PUBLICATIONS

De Groot, "New Media expo-interactive advertising & media expo," Newsbytes, Apr. 13, 1994.
"Internet Shopping Network launches Interactive Home Music Shopping Service with Intouch Group Inc. for Internet Users Worldwide," Business Wire, Apr. 11, 1995.
An article entitled "Got Cookies" from the Personal Technology section of the Mar. 11, 1997 edition of the San Francisco Chronicle.
Sony Auto Disc Loader CDK-006.
Digidesign Sound Tools.
TOPIX CD Premaster/Encoding System.
K. Hedlund, "CD-ROM," Computer Reseller News Mar. 21, 1988.
J. Rothfeder and J. Bartimo, "How Software is Making Food Sales a Piece of Cake," Business Week Jul. 2, 1990.
M. Bluestone, "Thanks to CDs, Listening Booths are Making a Comeback," Business Week May 9, 1988.
Virgin Records, Votan, Inc., Fremont, California.
D. Steinberg, "McKesson Data Kiosks Build Business for Its Customers," PC Week Mar.

3, 1988.
Los Angeles Times, "Automated Movie Ticket Machines Due".
Pollack, "A Credit Card Offshoot Blossoms," New York Times v:139 col. 3 pC1(N) pD1 (N) Aug. 3, 1990.
Val J. Golding, Telephone Software Connection, Inc. May 1980.
C. Barney, "Business Software Moves Over Phones," Electronics Jul. 28, 1983.
J. Beckett, "Safeway to Let Customers Do Self-Checkout," The San Francisco Chronicle.
"Introduction to Personics: New Revenues for Artists, Songwriters, Publishers, Record Companies and Retailers," The Personics System.
"Executive Summary" PICS Preview from The Retail Network.

ART-UNIT: 271

PRIMARY-EXAMINER: Voeltz; Emanuel Todd

ASSISTANT-EXAMINER: Kalinowski; Alexander

ATTY-AGENT-FIRM: Dergosits & Noah LLP

ABSTRACT:

A system for on-line user-interactive multimedia based point-of-preview. The system provides for a network web site and accompanying software and hardware for allowing users to access the web site over a network such as the internet via a computer. The user is uniquely identified to the web site server through an identification name or number. The hardware associated with the web site includes storage of discrete increments of pre-selected portions of music products for user selection and preview. After user selection, a programmable data processor selects the particular pre-recorded music product from data storage and then transmits that chosen music product over the network to the user for preview. Subscriber selection and profile data (i.e. demographic information) can optionally be collected and stored to develop market research data. Since the system provides for multiple embodiments, the system contemplates previewing of audio programs such as music on compact discs, video programs such as movies and text from books and other written documents. Furthermore, it is contemplated that the network web site can be accessed from a publicly accessible kiosk, available, e.g. at a retail store location, or from a desk top computer.

18 Claims, 57 Drawing figures

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# Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

**Search Results** - Record(s) 1 through 10 of 30 returned.

1. Document ID: US 6785671 B1
L5: Entry 1 of 30 File: USPT Aug 31, 2004

US-PAT-NO: 6785671
DOCUMENT-IDENTIFIER: US 6785671 B1

TITLE: System and method for locating web-based product offerings

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

2. Document ID: US 6714920 B1
L5: Entry 2 of 30 File: USPT Mar 30, 2004

US-PAT-NO: 6714920
DOCUMENT-IDENTIFIER: US 6714920 B1

TITLE: Information processing apparatus and information processing method

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

3. Document ID: US 6693236 B1
L5: Entry 3 of 30 File: USPT Feb 17, 2004

US-PAT-NO: 6693236
DOCUMENT-IDENTIFIER: US 6693236 B1

TITLE: User interface for simultaneous management of owned and unowned inventory

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

4. Document ID: US 6647417 B1
L5: Entry 4 of 30 File: USPT Nov 11, 2003

US-PAT-NO: 6647417
DOCUMENT-IDENTIFIER: US 6647417 B1

TITLE: Music distribution systems

h e b b g e e e f e ef b e

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 5. Document ID: US 6625581 B1

L5: Entry 5 of 30 File: USPT Sep 23, 2003

US-PAT-NO: 6625581
DOCUMENT-IDENTIFIER: US 6625581 B1

TITLE: METHOD OF AND SYSTEM FOR ENABLING THE ACCESS OF CONSUMER PRODUCT RELATED INFORMATION AND THE PURCHASE OF CONSUMER PRODUCTS AT POINTS OF CONSUMER PRESENCE ON THE WORLD WIDE WEB (WWW) AT WHICH CONSUMER PRODUCT INFORMATION REQUEST (CPIR) ENABLING SERVLET TAGS ARE EMBEDDED WITHIN HTML-ENCODED DOCUMENTS

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 6. Document ID: US 6615186 B1

L5: Entry 6 of 30 File: USPT Sep 2, 2003

US-PAT-NO: 6615186
DOCUMENT-IDENTIFIER: US 6615186 B1

TITLE: Communicating interactive digital content between vehicles and internet based data processing resources for the purpose of transacting e-commerce or conducting e-business

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 7. Document ID: US 6611813 B1

L5: Entry 7 of 30 File: USPT Aug 26, 2003

US-PAT-NO: 6611813
DOCUMENT-IDENTIFIER: US 6611813 B1

TITLE: Digital audio and video playback with performance complement testing

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☑ 8. Document ID: US 6611812 B2

L5: Entry 8 of 30 File: USPT Aug 26, 2003

US-PAT-NO: 6611812
DOCUMENT-IDENTIFIER: US 6611812 B2

TITLE: Secure electronic content distribution on CDS and DVDs

h e b b g e e e f e ef b e

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

9. Document ID: US 6606744 B1

L5: Entry 9 of 30 File: USPT Aug 12, 2003

US-PAT-NO: 6606744
DOCUMENT-IDENTIFIER: US 6606744 B1
** See image for Certificate of Correction **

TITLE: Providing collaborative installation management in a network-based supply chain environment

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

10. Document ID: US 6587837 B1

L5: Entry 10 of 30 File: USPT Jul 1, 2003

US-PAT-NO: 6587837
DOCUMENT-IDENTIFIER: US 6587837 B1

TITLE: Method for delivering electronic content from an online store

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

| Terms | Documents |
|---|---|
| L4 and @ad<=20001212 | 30 |

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# Hit List

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**Search Results** - Record(s) 11 through 20 of 30 returned.

☐ 11. Document ID: US 6507727 B1

L5: Entry 11 of 30 File: USPT Jan 14, 2003

US-PAT-NO: 6507727
DOCUMENT-IDENTIFIER: US 6507727 B1

TITLE: Purchase and delivery of digital content using multiple devices and data networks

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 12. Document ID: US 6502194 B1

L5: Entry 12 of 30 File: USPT Dec 31, 2002

US-PAT-NO: 6502194
DOCUMENT-IDENTIFIER: US 6502194 B1

TITLE: System for playback of network audio material on demand

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 13. Document ID: US 6496744 B1

L5: Entry 13 of 30 File: USPT Dec 17, 2002

US-PAT-NO: 6496744
DOCUMENT-IDENTIFIER: US 6496744 B1

TITLE: Method and system for custom manufacture and delivery of a data product

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 14. Document ID: US 6374177 B1

L5: Entry 14 of 30 File: USPT Apr 16, 2002

US-PAT-NO: 6374177
DOCUMENT-IDENTIFIER: US 6374177 B1

h e b b cg b cc e

TITLE: Method and apparatus for providing navigational services in a wireless communication device

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 15. Document ID: US 6368177 B1

L5: Entry 15 of 30 File: USPT Apr 9, 2002

US-PAT-NO: 6368177
DOCUMENT-IDENTIFIER: US 6368177 B1

TITLE: Method for using a toy to conduct sales over a network

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☒ 16. Document ID: US 6233682 B1

L5: Entry 16 of 30 File: USPT May 15, 2001

US-PAT-NO: 6233682
DOCUMENT-IDENTIFIER: US 6233682 B1

TITLE: Distribution of musical products by a web site vendor over the internet

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 17. Document ID: US 6226618 B1

L5: Entry 17 of 30 File: USPT May 1, 2001

US-PAT-NO: 6226618
DOCUMENT-IDENTIFIER: US 6226618 B1

TITLE: Electronic content delivery system

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 18. Document ID: US 6195646 B1

L5: Entry 18 of 30 File: USPT Feb 27, 2001

US-PAT-NO: 6195646
DOCUMENT-IDENTIFIER: US 6195646 B1

TITLE: System and method for facilitating the valuation and purchase of information

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

h e b b cg b cc e

19. Document ID: US 6092049 A

L5: Entry 19 of 30 File: USPT Jul 18, 2000

US-PAT-NO: 6092049
DOCUMENT-IDENTIFIER: US 6092049 A
** See image for Certificate of Correction **

TITLE: Method and apparatus for efficiently recommending items using automated collaborative filtering and feature-guided automated collaborative filtering

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

20. Document ID: US 6052670 A

L5: Entry 20 of 30 File: USPT Apr 18, 2000

US-PAT-NO: 6052670
DOCUMENT-IDENTIFIER: US 6052670 A
** See image for Certificate of Correction **

TITLE: Object oriented framework mechanism for an electronic catalog

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

| Terms | Documents |
|---|---|
| L4 and @ad<=20001212 | 30 |

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# Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

**Search Results** - Record(s) 21 through 30 of 30 returned.

21. Document ID: US 6049777 A

L5: Entry 21 of 30 File: USPT Apr 11, 2000

US-PAT-NO: 6049777
DOCUMENT-IDENTIFIER: US 6049777 A

TITLE: Computer-implemented collaborative filtering based method for recommending an item to a user

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

22. Document ID: US 5991737 A

L5: Entry 22 of 30 File: USPT Nov 23, 1999

US-PAT-NO: 5991737
DOCUMENT-IDENTIFIER: US 5991737 A

TITLE: Automated consumer response to publicly broadcast information

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

23. Document ID: US 5982891 A

L5: Entry 23 of 30 File: USPT Nov 9, 1999

US-PAT-NO: 5982891
DOCUMENT-IDENTIFIER: US 5982891 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

24. Document ID: US 5963916 A

L5: Entry 24 of 30 File: USPT Oct 5, 1999

US-PAT-NO: 5963916
DOCUMENT-IDENTIFIER: US 5963916 A

h e b b cg b cc e

TITLE: Network apparatus and method for preview of music products and compilation of market data

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 25. Document ID: US 5957695 A

L5: Entry 25 of 30 File: USPT Sep 28, 1999

US-PAT-NO: 5957695
DOCUMENT-IDENTIFIER: US 5957695 A

TITLE: Structure and method for displaying commercials and sending purchase orders by computer

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 26. Document ID: US 5930768 A

L5: Entry 26 of 30 File: USPT Jul 27, 1999

US-PAT-NO: 5930768
DOCUMENT-IDENTIFIER: US 5930768 A

TITLE: Method and system for remote user controlled manufacturing

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 27. Document ID: US 5918213 A

L5: Entry 27 of 30 File: USPT Jun 29, 1999

US-PAT-NO: 5918213
DOCUMENT-IDENTIFIER: US 5918213 A

TITLE: System and method for automated remote previewing and purchasing of music, video, software, and other multimedia products

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

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☐ 28. Document ID: US 5915019 A

L5: Entry 28 of 30 File: USPT Jun 22, 1999

US-PAT-NO: 5915019
DOCUMENT-IDENTIFIER: US 5915019 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

h e b b cg b cc e

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 29. Document ID: US 5864604 A

L5: Entry 29 of 30 File: USPT Jan 26, 1999

US-PAT-NO: 5864604
DOCUMENT-IDENTIFIER: US 5864604 A

TITLE: Method of providing message service for limited access telecommunications

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 30. Document ID: US 5860068 A

L5: Entry 30 of 30 File: USPT Jan 12, 1999

US-PAT-NO: 5860068
DOCUMENT-IDENTIFIER: US 5860068 A

TITLE: Method and system for custom manufacture and delivery of a data product

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

| Terms | Documents |
|---|---|
| L4 and @ad<=20001212 | 30 |

**Display Format:** TI Change Format

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# Hit List

Your wildcard search against 10000 terms has yielded the results below.
***Your result set for the last L# is incomplete.***
The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

**Search Results** - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 6625581 B1

L7: Entry 1 of 5 File: USPT Sep 23, 2003

US-PAT-NO: 6625581
DOCUMENT-IDENTIFIER: US 6625581 B1

TITLE: METHOD OF AND SYSTEM FOR ENABLING THE ACCESS OF CONSUMER PRODUCT RELATED INFORMATION AND THE PURCHASE OF CONSUMER PRODUCTS AT POINTS OF CONSUMER PRESENCE ON THE WORLD WIDE WEB (WWW) AT WHICH CONSUMER PRODUCT INFORMATION REQUEST (CPIR) ENABLING SERVLET TAGS ARE EMBEDDED WITHIN HTML-ENCODED DOCUMENTS

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 2. Document ID: US 6606744 B1

L7: Entry 2 of 5 File: USPT Aug 12, 2003

US-PAT-NO: 6606744
DOCUMENT-IDENTIFIER: US 6606744 B1
**** See image for Certificate of Correction ****

TITLE: Providing collaborative installation management in a network-based supply chain environment

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 3. Document ID: US 6374177 B1

L7: Entry 3 of 5 File: USPT Apr 16, 2002

US-PAT-NO: 6374177
DOCUMENT-IDENTIFIER: US 6374177 B1

TITLE: Method and apparatus for providing navigational services in a wireless communication device

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

h e b b g e e e f e ef b e

4. Document ID: US 6368177 B1

L7: Entry 4 of 5 File: USPT Apr 9, 2002

US-PAT-NO: 6368177
DOCUMENT-IDENTIFIER: US 6368177 B1

TITLE: Method for using a toy to conduct sales over a network

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw. De

5. Document ID: US 5918213 A

L7: Entry 5 of 5 File: USPT Jun 29, 1999

US-PAT-NO: 5918213
DOCUMENT-IDENTIFIER: US 5918213 A

TITLE: System and method for automated remote previewing and purchasing of music, video, software, and other multimedia products

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw. De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

| Terms | Documents |
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